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AMERICAN HISTORY

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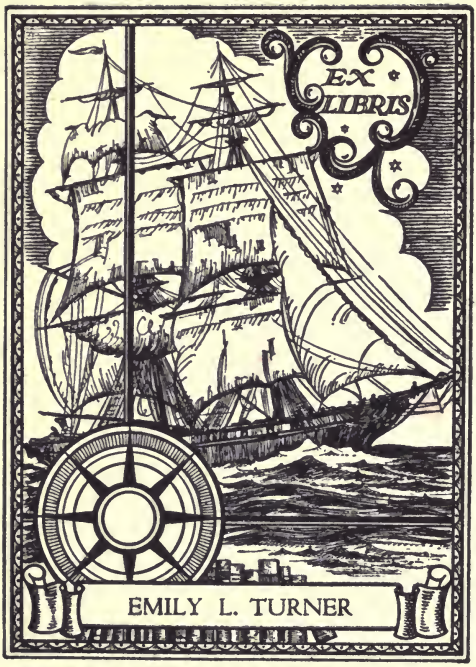
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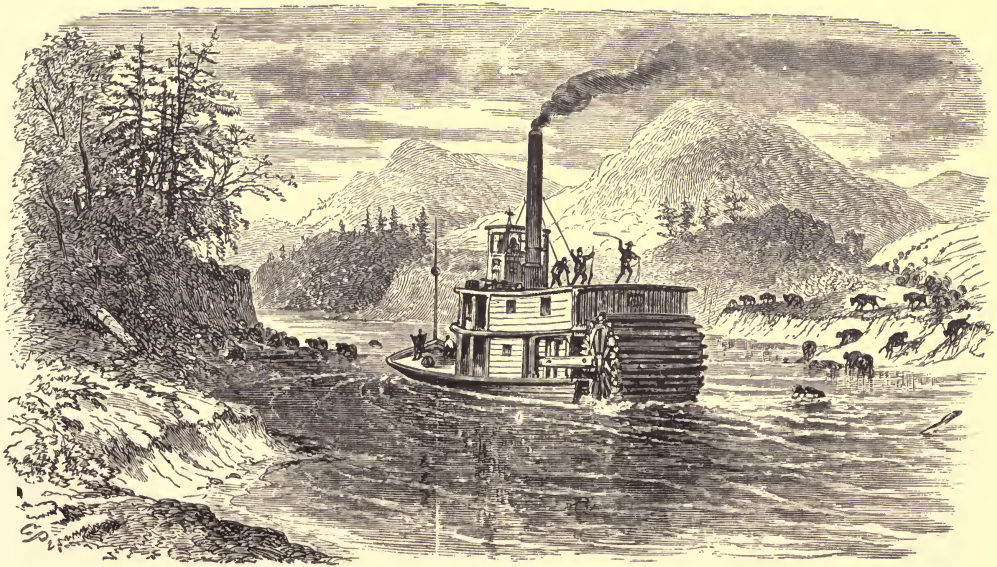

AMERICAN HISTORY

by

Jacob Abbott.

ILLUSTRATED
WITH NUMEROUS MAPS AND ENGRAVINGS.

VOL. I.
ABORIGINAL AMERICA.

New York:
Thomas Y. Crowell & Co.
13 Astor Place.

ABBOTT'S AMERICAN HISTORIES.

I.—*ABORIGINAL AMERICA.*

II.—*DISCOVERY OF AMERICA.*

III.—*THE SOUTHERN COLONIES.*

IV.—*THE NORTHERN COLONIES.*

V.—*WARS OF THE COLONIES.*

VI.—*REVOLT OF THE COLONIES.*

VII.—*WAR OF THE REVOLUTION.*

VIII.—*WASHINGTON.*

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PREFACE.

It is the design of this work to narrate, in a clear, simple, and intelligible manner, the leading events connected with the history of our country, from the earliest periods, down, as nearly as practicable, to the present time. The several volumes will be illustrated with all necessary maps and with numerous engravings, and the work is intended to comprise, in a distinct and connected narrative, all that it is essential for the general reader to understand in respect to the subject of it, while for those who have time for more extended studies, it may serve as an introduction to other and more copious sources of information.

The author hopes also that the work may be found useful to the young, in awakening in their minds an interest in the history of their country,

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and a desire for further instruction in respect to it. While it is doubtless true that such a subject can be really grasped only by minds in some degree mature, still the author believes that many young persons, especially such as are intelligent and thoughtful in disposition and character, may derive both entertainment and instruction from a perusal of these pages.

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ABORIGINAL AMERICA.

CHAPTER I.

TYPES OF LIFE IN AMERICA.

SUBJECT OF THE VOLUME.

THE first step to be taken in studying the history of our country is to form some clear and proper conception of the characteristics and condition of the territory which is now occupied by the American people, as it existed when first discovered and explored by Europeans. The aboriginal condition of the country, therefore, anterior to its occupation by white men, and the character and condition of the native tribes which then inhabited it, will be the subject of this volume.

ORIGIN OF VEGETABLE AND ANIMAL LIFE IN AMERICA.

When the new world was first discovered it was found to be, like the old, well stocked with plants and animals, and inhabited by a great many tribes and nations of men; and yet the plants and ani-

mals, if not the men, were all essentially different from those known in the old world. This was unexpected; it was thought to be quite remarkable, and it added greatly to the difficulty of deciding the question, which, of course, at once arose, in respect to the origin of these plants and animals and men, and to the manner in which they came in possession of a continent thus cut off apparently from all intercourse and connection with the rest of the world.

For the American continent is entirely separated from the old. The nearest approach which it makes to it in any part is at Behring's Straits, on the north-west, where it is divided from the Asiatic continent by a channel about forty miles wide.

MEANS OF COMMUNICATION WITH THE OLD WORLD.

Some animals and perhaps some plants, and most certainly man, may be supposed to have been transported across such a channel of water as this of Behring's Straits, either by boats made by the savages living on the coasts, or possibly by means of ice, either upon moving fields driven by the wind, or upon the solid surface, at some time when the whole channel was entirely frozen over.

There is also at some distance south of Behring's Straits a remarkable chain of islands, called

the Aleutian Islands, which extend in a regular and continuous line from the American to the Asiatic shore. These islands are nearly all inhabited, and the natives navigate the seas around them in boats made of a frame-work of wood or bone, covered externally with seal skins.

These islands are volcanic. They contain now numerous volcanoes, some active and some extinct, and also hot springs and other indications of subterranean fire. They bear no trees, but they produce a great variety of animals. They look, upon the map, like a row of stepping stones, placed on purpose to enable men and animals from the old world to make their way to the new.

It is perhaps possible to imagine also that a company of men might have been forced accidentally to sea in some large canoe from the coast of Africa, or on the other side from some of the islands of the Pacific, and so driven across the intervening water, and landed upon the American shores. It is true that it would be exceedingly improbable that any such combination of circumstances should occur as could lead to such a result. The canoe or boat must have been very large, the stock of provisions very great, and the wind, while it must not have been violent enough to engulf the boat, must still have blown very long

and very steadily to have carried a company of men so far before they all perished of hunger and thirst. All this would have been very improbable. Still it would be difficult to show that it could not occur. From the hundreds and perhaps thousands of boats full of savages that have been blown off to sea from the coasts of Africa, or from the South Sea Islands, it would be impossible to prove positively that there could never have been one that by any chance could have reached the American shores.

There is still another mode by which we can imagine the animal and vegetable life of America to have been communicated to it from other regions, and that is, by supposing that there was in former ages some direct connection between the two continents by a tract of land which has since become submerged. It is well known now that the crust of the earth is not in a stable condition. It is subject to changes and movements of various kinds, which are now going forward all the time, and have probably always been going forward. In some places the land is slowly rising; in others it is slowly subsiding. There are many places in the world where towns and cities which formerly stood high and dry on the land are now under water. The land has slowly subsided, so that the sea at

the present time flows over it, and people passing in boats now look down and see the old foundations, and fragments of the fallen walls and columns, at the bottom.

The rising and sinking of the land in this way can only be directly and positively proved in places which lie along the sea shore, for nowhere else is there any exact standard of comparison by which the rising or falling may be measured. But it is now generally believed by geologists and philosophers that a state of gradual motion, rising in some places and sinking in others, is the natural and constant condition, or, as it is more scientifically expressed, the *normal* condition of the strata which form the crust of the globe. Of the causes which lead to this state of things it would be out of place to speak here, but there is no doubt of the fact; and this action is in no part of the world going on so actively and with so sensible an effect as on some of the coasts of America.

Now, although these changes of level proceed in an extremely gradual manner, so that the inhabitants that dwell upon the territory thus slowly rising or falling are, in most cases, wholly unconscious of the motion, still the effect might be sufficient, in the course of forty or fifty centuries, to submerge a very extensive tract of land, which

in remote ages may have formed a connection between the American continent and other lands lying to the eastward or westward of it.

THE PLANTS AND ANIMALS OF AMERICA GENERALLY NEW.

These and various other similar theories were devised in former times in endeavors to contrive some way of bringing plants and animals from other countries to America; but they have been generally considered unsatisfactory, since on coming fully to examine the plants and animals living here, they were found to be, as it seemed, *essentially different* from those found in other countries, so different as to render it very improbable, according to the ideas on this subject that have hitherto generally prevailed, that they could ever be descended from the same stock, at least by ordinary generation. The *fauna* and the *flora* were both found to be in general essentially dissimilar.

We say in general, for there are some animals, such as birds, that might easily fly across the ocean, and sea-weeds, that might drift across, and polar animals, such as bears, seals, foxes and dogs, and the like, which go and come as they will, all over the Arctic seas, that were found common to both worlds. With a moderate number of ex-

ceptions such as these, however, the plants and animals found in America proved on examination to be entirely new.

By the *fauna* of a country is meant the system of animals that inhabit it. The *flora* is its system of plants. Now, inasmuch as both the fauna and the flora of America were so essentially different from those of the old world, that, so far as could be judged from all that was known of the propagation of plants and animals, and of the changes which they may undergo from the influence of climate and soil, and other conditions, the one system, in the opinion of naturalists, could not have been produced from the other, it seemed to be wholly useless to attempt to contrive means by which the progenitors of the present races in America could have been wafted across the ocean, or could have migrated by means of countries and territories which once existed, but are now submerged.

MAN ADMITTED TO BE AN EXCEPTION.

This reasoning, however, applied only to plants and to inferior animals, but not to man; for the races of men found upon this continent were deemed by naturalists to be of the same species with all the other races now existing in the world: that is, the

difference between the different races of men were judged to be not *specific* differences, that is, not such as to preclude the possibility of their all being deduced from one original pair. This has always been the general opinion among naturalists, and in their systems of classification all the various races of men are classed as one species. Man, therefore, it has always been admitted, may have been brought to America over the ice at Behring's Straits, or by boats blown off from the coast of Africa, or from the islands in the Pacific; but the general stocking of the country with its countless thousands of species, both of animal and vegetable life, it was thought could not be thus explained.

WHAT IS A SPECIES?

The degree of probability that the present plants and animals of America could not have been derived, within a modern period, and by direct descent, from those of the old world, depends, of course, upon the *degree of difference* there is between them, because there is a certain degree of difference, and that not small, which changes of climate and soil, and of other conditions of that kind will account for; but the difference in question was found to be very great indeed. It is a *specific* difference, that is, a difference in the *species*.

A species of plants or animals, as the term has been generally used by naturalists, comprises all such individuals as are so similar to each other that we may suppose them all to have proceeded from one common parentage, and so dissimilar from all others that they could not have been produced from the others, nor the others produced from them, by ordinary generation.

Whether there be or not some extraordinary mode by which at rare and distant intervals, and under conditions seldom occurring, and which have not occurred under the observation of men, by which a *new species* can arise, having its origin, in some way or other, in a former species, in the same sense as now a new *individual*, of the same species, has its origin in a former individual of the same species, by the production of a seed or an egg, for example; or whether it may not be possible that in an exceedingly great length of time, and by means of a very long-continued accumulation of minute and almost imperceptible changes, one species should be transformed into another, or, by branching, give origin to several others, adapted to new and peculiar circumstances arising in the world's history, are questions which are now greatly agitated among the learned, and may not soon be settled. All we know is, that the plants and ani-

mals throughout the world exist in species, each one of which stands at present distinct and isolated, wholly apart from all the rest, and one cannot be transformed into another by ordinary generation, through changes of soil and climate, or any other causes whatever known to man, within so short a period as six thousand years.

The apple, for instance, is one species, and the pear is another. In many respects they are similar to each other, and each may be changed by cultivation and by the operation of other causes a great deal, but by no possibility can one be derived from the other. By different modes of cultivation, by different selections of seeds, by changes in soil, and by other such means, a horticulturist may vary the character of his apples very much. He may produce large apples and small apples, sweet apples and sour apples, apples with a skin red, green, yellow, or brown, but he can never produce a pear. The apple, under all its modifications, will remain an apple still. It is a species by itself, separated from all other species whatever by a fixed and permanent bound, which it is impossible, as has always been supposed, that it can ever pass.

It is the same with animals. Each one is subject to a great many modifications in respect to its form, its size, its color, and even its faculties, but

through all these changes each one remains entirely within its own bounds, as it were. The distinguishing characteristics of the species remain unchanged. Take, for instance, any species of the dog. We may, perhaps, by means of differences of treatment, of food, of climate, or of immediate parentage, procure big dogs and little dogs, weak dogs and strong dogs, gentle dogs and fierce dogs, all proceeding from the same original stock, but we can have no cats, nor anything that shall bear the least *specific* resemblance to a cat.

THE DISTINCTION OF SPECIES VERY PERMANENT.

It may, perhaps, be said that although in the comparatively short periods of time that have been covered by the experiments and observations which have been made by man, the transformation of one species into another may have been impossible, still such changes may have been effected in longer periods, and that the various forms of animal and vegetable life which now exist upon the earth may have proceeded from some common origin, or at least from some moderate number of original types existing in former ages. And, indeed, this may possibly be so. But there seems to be quite satisfactory evidence to prove that the distinction of species is as permanent in respect to the past

and the future, *at least for very long periods*, as it is decisive at the present time.

EVIDENCE OF ANCIENT RECORDS.

In the first place, we have in Egyptian and Assyrian monuments, which go back with their records several thousand years—much more than half the time, according to the usually received opinion, since the earth was stocked with the present races of animals—many drawings and other representations of plants and animals as they existed then, and even seeds, in some cases, found in the wrappings of Egyptian mummies, all of which show that these plants and animals, and even the races of men, were specifically the same then as now. There have been no changes whatever that encroach at all upon the limits and bounds by which the different species are separated from each other at the present day, or confuse the lines of demarcation in any degree. There is no approach of one type toward another, nor any tendency to such an approach. Now, if a change could be effected in the specific character of a plant or of an animal, in any limited series of generations, we should be very likely to find evidences of it in a period of three or four thousand years, especially in the case of such animals as arrive at

maturity in a short time, and thus in any given period reckon as many generations as years. Between the bird carved upon an Egyptian or Assyrian slab, and its representative at the present day, probably three thousand generations may have intervened, and yet the present living specimen is specifically identical with the delineation of its ancestor. The great comparative anatomist Cuvier examined the mummy of an ibis, from three to four thousand years old, comparing it minutely with a living bird of the present day, and found the two specimens in all respects identically the same.

There is also a bass-relief from the ruins of Babylon, with a dog represented upon it, which is found by naturalists to be identical with a species of the dog existing in Asia at the present day.

EVIDENCE OF FOSSIL REMAINS.

But we have still more conclusive evidence than this derived from ancient monuments of the very great permanence of the characteristics by which different species of plants and animals are distinguished from each other, in the *fossil remains* which exist in the strata of the earth. By means of these our observations upon the forms of vegetable and animal life which have existed upon our

globe may be carried back to an immense antiquity. and extended over so vast a number and variety of species as to furnish us, as it has always been supposed, with all the means of information on this subject that can be desired. It has been thought to be fully proved by these observations that every species which exists upon the earth remains unchanged so long as it exists. When at length its period has expired, it disappears from the field, while new ones are continually arising to take the place of those that are gone. But no one passes, by gradations, into any other; and the lines of distinction by which each is separated from all the rest remain sharp and well-defined from the beginning to the end.

OPINIONS OF NATURALISTS AND PHILOSOPHERS.

At least, this has been hitherto the view which naturalists and philosophers have almost unanimously taken of this subject, though there have not been wanting writers who have maintained the contrary opinion. Notwithstanding the evidence furnished by the appearance of fossil remains, that the lines of demarcation separating the different species are absolutely and forever impassable, there have been some advocates of the theory that all the present races of animals may have been de-

rived by insensible gradations from a few primordial types. This theory has very recently been brought forward anew in a form to attract general attention. Still, so unanimous and so decisive has been the testimony of geologists in respect to the evidence furnished by the fossil remains, and so inconsistent is it with the development theory, as it is called, that very great changes must take place in the opinions of naturalists in respect to the true import of the geological records before this opinion can be generally received.

But however the great question in respect to the absolute and perpetual permanence of the distinction of species may be ultimately decided, there is no doubt that all naturalists fully concur in the opinion that this permanence is, at all events, so great as entirely to preclude the possibility that the American species of plants and animals can have descended from the stocks of the old world within so short a period as six thousand years. Some other supposition must, therefore, be made than that the forms of life existing here could have been derived, within that period, by ordinary generation from those prevailing in other portions of the world. Some of the principal suppositions which have been made will be presently alluded to.

EXAMPLES OF DIVERSITY.

Some of the American plants and animals attracted great attention in Europe when they were first made known there, being recognized as entirely new, and found to be quite peculiar in character. The potato was one; the turkey was another. No turkey was ever known to exist in Europe, Asia, or Africa before that time, and no fossil remains of such an animal have ever been discovered there. The tobacco plant was another species that was originally first found in America, though it has since become extensively diffused throughout the world. A more particular account of some of these plants and animals will be given in future chapters. They are only mentioned here as illustrations of the great truth, that when this country was first explored by European visitors an entirely new series of forms of vegetable and animal life was found to prevail here, and such as could not have resulted from any of the forms that prevail in the old world, within the period of six thousand years, through the operation of any laws that are known to us, in respect to the relation of parent and offspring.

THE GENERAL TYPES THE SAME.

And yet, though the plants and animals that are found in America are all different, and seem to

be *essentially* different, so far as relates to derivation from the same parentage within any moderate period, from those of the old world, it is a very curious and a very significant fact, that there is a very close analogy between the two great stocks—an analogy so close as to furnish very strong reason to believe that they must have had a common origin, or at least have derived their existence from some common law. All, or nearly all, the *great types* of animal and vegetable life which are known in the old world, have their representatives in the new, and yet no particular *species* are so represented. While there is a *generic* similarity, there is also a *specific* difference. We scarcely know which excites most our wonder and curiosity, the analogy in the great types, or the total, or almost total diversity in individual species. We say almost total, for, in addition to the exceptions already referred to, by the time that the fauna and flora of America came to be fully examined, great numbers of animals had been brought over, either by accident or design, from Europe, and mingled with the animals in America; and there are many plants which are now found growing wild in various parts of the country, and seem to be natives, but which are identical in species with those growing in Europe. It is inferred in such cases that

the seeds were originally brought from the old world, though perhaps it cannot in all cases be positively proved that they were. It may however be said with certainty, that, as a general rule, of

LAMMERGEYER OF THE ALPS.

the hundreds and thousands of plants and animals, natives of America, that have been examined and described, all, or nearly all are essentially different from those of corresponding type produced by the old world.

The accompanying engravings, which represent

the gigantic vultures which inhabit the mountain summits respectively of the new world and the old, strikingly illustrate this principle. While they are generically similar, both in their structure and in

CONDOR OF THE ANDES.

their habits, still, in respect to what the naturalists call specific characters, they are entirely distinct.

THE MYSTERY GENERAL.

The mystery which attends the origin of these different and peculiar species of plants and animals

inhabiting the new continent, has been found, since America was discovered, to be general, for it is now known that not merely America, but also every part of the globe, so far as the different zones and districts of the earth are separated from each other by seas, or mountains, or other great natural boundaries, has each its own fauna and flora different from those of every other region. These differences of species, too, exist not in space only, but in time. From the evidence that an examination of the strata of the earth affords, we find that every different period of the earth's history, going back to very remote ages, had its own system of plants and animals, so that thousands of species that existed once do not exist now, and those which exist now did not exist then. Thus it is established by evidence that seems to be conclusive, that just as in the history of any one species, there is a succession of individuals, each of which is born, grows, flourishes, declines, and dies, to be succeeded by others which rise into being, and come forward to maturity, while their predecessors decline; in the same manner, in the history of the *world*, there has been a succession of *species*, each of which has come into being in its own time, increased in numbers, become widely extended, and then has gradually diminished and finally

disappeared, to be succeeded by other species that arise in the same manner, and go through in the same manner the successive periods of youth, maturity, and decay. Thus it would appear that, of the vast congeries of animal and vegetable creations which the history of the globe presents to view, each separate period of its existence, and also every different district on its surface, has received its own peculiar and exclusive forms. There are several different opinions in regard to the proper explanation of this remarkable fact. Of these opinions only two are now seriously entertained by naturalists and philosophers, and the question between these two is, at the present time, a subject of earnest discussion throughout the whole scientific world.

THE TWO PRINCIPAL THEORIES.

The first opinion is, that each species is, in its essential nature, and has been throughout its whole history, entirely distinct from every other one, and that it was called into being in its own appointed time, either by a special act of creation exerted for this end, or else by the operation of some general laws to us wholly unknown, by which, when certain conditions are combined, a new species is derived in some mysterious way from one or more

other species existing before it, just as *individuals* of any given species are known to proceed from other individuals of the same. This opinion has been hitherto a prevailing one among naturalists and philosophers, and a great desire has been felt to discover the general conditions and laws, if such there are within the reach of human observation, under which new species arise.

The second opinion is, that life, in all its manifestations, throughout the whole vegetable and animal world, is *one*, and that all organizations that now exist, or have ever existed, have been produced, by a succession of exceedingly gradual and long-continued changes, from one, or at most a very few, primordial forms.

These changes, it is supposed, result from a constitution of vegetable and animal life such that very slight modifications of structure occur in all cases in the descent from parent to offspring; that these modifications, which are insignificant, and sometimes scarcely perceptible in the first generation, become very great by being accumulated in a long series of years, and that changes thus resulting, branching off in different directions, as it were, according as the conditions and influences to which different races are exposed, vary, in different places and times, and acting through immensely

long periods of time, have given rise to all the countless forms of animal and vegetable life with which the world now teems.

INQUIRIES INTO THIS SUBJECT RIGHT AND PROPER.

This is not the place to discuss, nor even to explain these opinions. They are only briefly alluded to here, on account of the bearing of this general question on the origin of life in America. Some persons feel a degree of hesitation in following the guidance of naturalists in their inquiries in respect to the laws of life, as if the object of those engaged in these studies was to discover some way of accounting for the works of creation without acknowledging the hand of a creator. But this is not so. Scientific inquiries into the causes of what we see are not attempts to dispense with a divine agency in nature, but to discover the manner in which this agency is exercised, and the laws by which it regulates its action. When Franklin, and the other philosophers of his time, made known to the world that they had discovered the cause which produced thunder and lightning, many people thought it was impious for them to pretend to have done so. For the philosophers to attribute a phenomenon which had always been regarded as produced directly by the power of God to petty sec-

ondary causes, which they had themselves discovered, was, in the opinion of these persons, atheistical and profane.

But it is now universally admitted that such a discovery does not limit or control the power of God at all. It only enables us to see somewhat further into his ways. No one detracts from the honor due to an engineer for any grand result that he produces, by explaining the mystery of the secret mechanism that he has contrived by which to produce it.

It is so with all the works of nature. We may push our inquiries in every direction with the utmost diligence and vigor, and carry them to any extent, without the least fear of ever making any discoveries which will tend in the smallest degree to supersede the agency of a supreme and all-pervading power, either in the original constitution of nature, or in the constant control of all that takes place under the operation of its laws.

THE TESTIMONY OF SCRIPTURE.

There is another source of apprehension, of a religious nature, by which the mind is sometimes restricted and hampered in studying the laws of nature and the past history of the globe, and that is the fear that something will be found which may

conflict, or at least appear to conflict, with the testimony of Scripture, and thus shake the foundation of our Christian faith. But we must consider that the book of revelation is intended to instruct us solely in moral and spiritual truths, while the book of nature has been opened before us to teach us science and philosophy. They are both equally from God. In one as much as in the other, it is his voice that we hear, and his instructions that we receive; and we must not allow our ears to be closed, or our reason to be trammeled, in respect to what he teaches us directly in one, by too literal interpretations of what is said incidentally and indirectly in the other. Since the great mistake which was made in the time of Galileo, when it was attempted to shut out from mankind the evidences presented by mathematics and astronomy, in respect to the laws of the solar system, by inferences ignorantly drawn from incidental allusions in the Scriptures to the motions of the heavenly bodies, all wise and good men have come to the conclusion that we must look to the word of God for instruction in moral and religious truth alone, while for science and philosophy we must go to that other volume—the great system of creation and providence—which the same infallible teacher has spread open before us. Each comes from the same

hand, and each in its own sphere is, in a certain sense, equally, for us, the word of God.

MEANS OF TRANSPORTATION FOR ANIMALS AND PLANTS.

A great many very curious modes by which plants and animals may be transported from one country to another, even across wide and deep seas, have recently been brought to light, which very much diminish the difficulty of supposing that America might have been stocked from the old world—provided always, we grant that plants and animals are subject to extensive modifications in the course of long periods of time, by which the species is finally changed, and new forms adapted to new situations and conditions are developed.

In the first place, the sea, instead of lying motionless, except so far as it is agitated by winds, as is often supposed, is subject to a great number and variety of currents, flowing in all directions, many of them at the rate of from twenty to sixty miles a day. These currents convey fields of ice, masses of drift wood, branches of trees with nuts, fruits, or other capsules containing seeds attached to them, and the bodies of dead birds, with seeds in their crops. There are many savage nations, living in countries that produce no trees, that depend on drift wood altogether for all the material of this

sort that they use in making utensils and weapons, and even sometimes for building and for fuel. Now, the trunk of a single tree might contain the seeds and eggs of a hundred different species of minute plants and animals, and though great numbers would doubtless perish, many would probably be preserved.

Experiments have recently been made to ascertain how long seeds can remain submerged in sea water without losing their power of germination, and it was found that out of many hundreds subjected to the trial quite a large number grew after being in the water from twenty to ninety days. This would give them time to be conveyed a great distance by a current of the sea flowing at the rate even of twenty-five miles a day.

A certain philosopher wishing to ascertain how far aquatic birds might convey seeds from one lake or pond of fresh water to another, in the mud adhering to their feet, took out a portion of such mud, in order to ascertain how far it might be supplied with the germs of vegetable life. The quantity which he took was about a tea-cup full. This mud he placed in a situation to allow the seeds which it contained to germinate, and as fast as little plants appeared he pulled them out and counted them. He obtained from this single tea-

cup full of soil more than *two hundred* living plants! Thus great numbers of transfers of plants from one region to another are doubtless made, merely by the feet of aquatic birds.

In a somewhat similar manner the young of many small animals are conveyed from lake to lake and from river to river, by attaching themselves to the feet and legs of birds, floating or wading in the water.

A great many other curious examples like these of the manner in which nature has provided for the wide dissemination of the minuter forms of animal and vegetable life might be given if time and space would allow.

GLACIAL ACTION.

Whenever the temperature of a country, either from its great elevation or from its high latitude, is such that the summer cannot thaw the snow and ice which the winter produces, what are called *glaciers* are formed. These glaciers are beds of solid ice, of many hundred feet in thickness, which are formed in valleys or upon broad slopes of land, and which all the time slowly move down the descent upon which they lie, as if there were a certain slight and imperfect fluidity in the constitution of the ice. When such a glacier has its lower ter-

mination in a valley it sometimes ploughs up the ground before it, and deposits stones, which it has brought down upon its surface, in a particular way, and produces other curious effects, the results of the glacial action, by which the geologists feel confident that they can determine, upon a proper examination of any district or valley, whether or not a glacier has ever been at work there.

When these glaciers terminate upon the shore of the sea, the lower edge is forced out over the water by the pressure of a mass above and behind, until the projecting mass, sometimes many hundred feet in thickness, is broken off, falls over, and is borne away by the current or the wind. This is the way in which the immense icebergs that are seen floating about even in the middle of the ocean are formed.

THE GLACIAL PERIOD OF NORTH AMERICA.

It is alleged by geologists that there are abundant evidences of former glacial action throughout all the northern and central parts of North America, and also of Europe and Asia, indicating that at some remote period the climate in all the northern latitudes was very much colder than it is now. Indeed, some astronomical arguments have recently been advanced showing that the earth, by the laws of its motion round the sun, which lead to

a change in the position of its axis in relation to the sun, is subject to certain grand oscillations of temperature, in which the regions of the north and of the south poles are alternately made warmer and colder, and that at the present time the condition of the north pole is intermediate between the two extremes. However this may be, there are undoubted geological proofs that in former ages the northern countries, both of the old continent and the new, have been at one period much colder, and at another much warmer, than at present. When the climate was colder the reign of ice in all the northern regions, and the influence of it in connecting continents and transporting animals and men, would be of course greatly increased. If now we suppose that at such a time great numbers of the then existing species of animals were transported across the intervening seas, and then gradually spread themselves southward, undergoing slow modifications as they advance, to fit them for the new conditions to which the changes of the climate or their own changes of habitation exposed them, we should have very nearly the result which is now observed to exist.

These ideas, however, are, after all, at present only the speculations of naturalists and philosophers, ingenious and interesting as they are.

PACIFIC OCEAN
NARROW
WESTERN SLOPE
GREAT DESERT
INDIAN DISTRICTS
Salt Lake
LAKE COUNTRY
High Lakes
Low Lake
Falls
GREAT VALLEY
HILLY COUNTRY
Cape
Bay
Bay
Stormy Cape
ATLANTIC OCEAN
PLAIN
GULF
PHYSICAL FEATURES OF THE COUNTRY
RICHARDSON N.Y.

CHAPTER II.

FACE OF THE COUNTRY.

THE MAP.

THE map on the adjoining page represents the portion of the North American continent which is at the present time occupied by the people of the United States. It will assist very much in reading intelligently the history of the country if we first obtain a clear and comprehensive view of the great and leading features of its geography.

These features are very marked and striking—more so, perhaps, than those of any other country on the globe. This will clearly appear by an inspection of the map, and by filling out, in imagination, the outline which the map presents, with the details which will be given in this description.

As you look upon the map imagine that you are in the air, looking down upon it as from a balloon, and take notice of what you see. On the east and on the west are the shores of two oceans. That on the east is the Atlantic. The Pacific is on the west.

THE LAKE COUNTRY.

Toward the north is an immense tract of nearly level land, covered with forests, but containing a vast number of depressions in the surface of the land, all of which are filled with water and form lakes, some large and others small. This land, though level, is high, so that there is a very considerable though gradual descent from the lakes to the ocean. The lakes are kept constantly full by the rains and by the melting of the snows, and the surplus waters flow off in one vast channel, northward and eastward to the sea.

One of the large lakes, though still much higher than the sea, is marked as a low lake, for it is two or three hundred feet below the level of the others, and the water flowing from the upper lakes into it, in descending from one level to the other, passes over a high precipice, thus producing an immense fall, which is the celebrated Niagara.

The surplus waters of all the large lakes flow off finally in a northeasterly direction, almost exactly parallel to the coast until they reach the sea. The river thus formed is now known as the St. Lawrence. Observe, that between the river and the coast there is a long and somewhat narrow strip of land, which will be spoken of more particularly under another head.

All this region of the lakes is inhabited—during the summer season by immense numbers of beasts upon the land, of birds in the regions of the air, and of fishes in the water. In the winter it is buried deep in ice and snow. The birds at that season have all flown. The animals have retired to dens and holes, where some sleep, torpid, till the spring returns, and others burrowing beneath the frosty covering which clothes the ground, gain their livelihood there by digging for roots, or gnawing the bark of trees, or catching the fish that are still swimming in the imprisoned waters.

FUR-BEARING ANIMALS.

Almost all the land animals that inhabit these regions—being exposed for six months in the year to intense cold—are protected by a thick and warm coat of hair and fur. In the larger animals the hair is coarse, but thick and warm, though much less so than in the case of the smaller animals; for the smaller the body is that is exposed, the more perfect the protection that it requires, one large mass being more easily kept warm than a multitude of small ones.

The region of these lakes, and of the country north of it, which, for many hundreds of miles, maintains the same character, is one of the most

extensive and most celebrated fur-bearing districts in the world. The shores of the lakes, and the banks of all the millions of little brooks and streams, are full of minks, otters, beavers, sables, and multitudes of other swimming and burrowing animals of that kind, whose fur is softer than silk and warmer than wool. When, therefore, you look upon the map and imagine that your eyes are surveying the real country, you must picture it to your mind as swarming with all this life, winter and summer.

In the summer these animals ramble about in the forests, or along the borders of the lakes and streams, amid a profusion of the most luxuriant and most beautiful flowers. Some climb the trees, and run along upon the branches in search of nuts for their winter stores. Some burrow in the ground, at the margin of the water, with the orifices of their dwelling convenient either for foraging upon the land, or for fishing and swimming in the ponds and streams.

THE INDIAN INHABITANTS.

There is one thing more to be brought to mind in order to complete the picture, and that is, the presence of many wandering tribes of Indians roaming over the country. The smokes from their

scattered wigwams rise among the trees both in summer and in winter. They build their habitations of the bark of trees. They hunt and trap the land animals, and snare the fish. They eat the flesh for food, and clothe themselves with the skins and furs. Each tribe preserves in a measure its own range, and yet sometimes they become involved in dreadful quarrels, in which the ordinary repose of the silent and solitary forests is broken by the frightful yells of a troop of maddened savages breaking at midnight into the encampment of their foes, or by the piercing cries of women and children whom they massacre in their fury.

INFLUENCE OF THE MORAL INSTINCTS.

These scenes of war and devastation are, however, only incidental and occasional interruptions to the ordinarily peaceful flow with which the current of life here, as in all other countries and climes, flows on. The Creator has implanted in the human mind a natural sense of justice, a love of what is right in the dealings between man and man, and a disapproval of what is wrong, the influence of which, in all human communities, is ordinarily sufficient to preserve peace, even in the most rude and savage states of society. Thus, in picturing to our imaginations the scenes that were

presented in this lake country, while in its aboriginal condition, we must conceive of the inhabitants as ordinarily employed in their various industrial pursuits of hunting and fishing, of fabricating implements and clothing, of building wigwams and making encampments, and of rearing their children. The scenes of violence and war that occurred to disturb the usual quite of their lives, though very serious in their results, were exceptional, and comparatively rare. It is very doubtful, indeed, whether they were more frequent, or more destructive, in proportion to the numbers affected by them, than the similar quarrels which have occurred among Christian and civilized nations, as shown by the history of Europe during the last five hundred years.

THE GREAT CENTRAL VALLEY.

South of the lake country, and occupying a very large portion of the whole interior of the continent, is a broad though shallow valley, bounded both on the east and on the west by ranges of mountains. The extent of the valley is marked on the map, not only by the mountains which bound it on the east and on the west, but also by the ramifications of the great river which drains it. These ramifications are seen spreading in every direction, like the

branches of a mighty tree, and terminating in the south in one great trunk, through which the united volume of waters is poured out into the great gulf which is seen delineated there. This is the great river Mississippi, with its thousand tributaries. If it were the real scene, instead of a mere map that we were looking upon, we should see all the branches of this immense system glistening in the sun between banks loaded with luxuriant forests, and adorned with fruits and flowers of every conceivable character and form.

THE SOIL OF THE GREAT VALLEY.

The soil of the whole valley, which, however, is so broad and so shallow that, seen as we have imagined from above, it would have more the appearance of an extended plain than of a valley, is extremely fertile. It is what is called an *alluvial* formation; that is, a very large portion of the territory has been covered with deposits from the rivers themselves, left after overflows and inundations. These deposits have accumulated, in the course of ages, to a great depth, and they form an exceedingly rich and fertile soil. The rivers twist and turn this way and that in meandering through these plains; and when swollen by rain or by the melting snows, they undermine the banks, and

bring down great masses of earth, and great numbers of immense trees into the water. The earth thus washed in is carried down by the flood, and after being mingled with a great variety of animal and vegetable remains, is distributed over widely extended districts below, when the water has overflowed the banks, and thus adds, throughout all the country so covered, a new layer of fertility to the soil.

FORMATION OF ISLANDS IN THE RIVER.

The trees float on, too, upon the current. Some drag by the roots and get lodged along the banks or upon shoals, in the bed of the stream. In this latter case they intercept others coming down, and so create an obstruction, around which sand and sediment collect, until an island is formed. When this new formation becomes consolidated, it turns the current of the stream, and perhaps in the end is the means of deflecting the river into a new channel.

There is another way by which islands are formed. The river wearing continually upon its banks, and making immense convolutions in its course, sometimes cuts through a narrow neck, where previously it flowed around in a great circuit. A new channel is thus made for a part of the water,

while the rest flows on round the circuit in the old course. By this means an island is formed, which may, perhaps, continue for centuries to divide the stream.

SWAMPS.

At length, perhaps, in the case of such an island, the old channel becomes choked up and closed at the opening, having previously become half filled with the floating trunks of trees, and all manner of brush and rubbish. Henceforward it remains a stagnant pool, a mile perhaps wide, and fifty miles long, filled with aquatic plants of every kind, and with decaying and half sunken trunks of trees, all covered and adorned, where they emerge into the atmosphere, with rich mosses, green and brown, and with graceful ferns, which hang drooping like tufts of feathers along the banks, or clinging, wherever they can get a foothold, to the trunks of the decaying trees.

The lagoons and morasses formed in this manner, in ancient times, became the peaceful and happy abode of vast numbers of animals adapted to such a habitation. Alligators, lizards, serpents, and reptiles of all kinds, crawled along the banks or slept in the sun upon the logs that lined the shore; while long-legged birds waded in the water fishing for

their food among the sedges, and flocks of ducks and other wild fowl, some of them resplendent in plumage, and adorned with the most gorgeous hues of orange, crimson, blue and gold, lay floating on the surface, or flew in flocks hither and thither through the air. The lagoons and morasses were inhabited by these animals in millions.

THE OLD FORSAKEN CHANNELS.

In other parts of this great valley swamps and morasses were formed in another way. The river, when it overflowed its banks, carried over with it, upon the land, immense quantities of sand, gravel, and driftwood, and other such substances, whether floating upon the water or suspended in it. These substances would, of course, be caught and retained, or, if heavier than the water, would subside, in greater quantities near the bank than further inland; that is, the largest and heaviest would become lodged, while the water itself, carrying with it the finer sediment, would flow further into the interior. Thus the land would become built up, so to speak, faster near the river than further inland, and consequently would rise higher; and the water which was carried over into the plains beyond could not flow back into the river again. Instead of this, it would find its way into every

FORSAKEN CHANNELS.

low and sunken tract, which would, of course, in this way become half submerged, and long before the water could be evaporated by the sun a new supply would come in from another inundation.

The result is, that throughout the whole extent of the valley, especially in the southern and lower portions of it, great tracts of land have become half submerged, and continue permanently in that condition, and thus, though teeming with animal and vegetable life, are wholly unfit, in their present state, for the abode of man.

THE MOUTH OF THE MISSISSIPPI.

The mouth of the river, as might be expected from the prevailing character which it bears throughout its course, presents a very extraordinary spectacle. The torrents that come down in the great floods bring with them vast numbers of trees and immense quantities of brush and drift wood, and also of sand and mud held in suspension by the water, all of which are swept out in every direction around the mouth of the river and deposited there. In this way, in process of time, a delta, or projection of the land has been formed, which is so large as to be plainly perceptible upon the map. This land rises scarcely above the level of the sea, and the water of the river makes its way

through it in every direction, in many different and devious channels. The whole tract is, in fact, an entangled mass of trees and brushwood, matted together and gone to decay, and covered with mud and slime; and so unfit for the habitation of man that when, on the coming of the Europeans, a landing-place was required on the bank of the river, it was found necessary to ascend more than one hundred miles before a site suitable for a town could be found. And even at that spot the surface of the river is now often higher than the streets of the town which has been built there, and in digging a foot or two anywhere in the soil we come to the water.

THE PRAIRIES.

In the northern part of this great fertile basin, watered by the Mississippi and its branches, there is a vast extent of country void of forests, or nearly void of them, there being no wood upon it except narrow belts of trees growing along the margins of the rivers. This country consists of boundless plains of grass land, called prairies. The soil is very fertile, and the grass grows high; and when from any small elevation the traveler takes a survey of the scene, looking out, as he may, to an unobstructed horizon on every side, and seeing the

grass waving in the wind throughout the whole expanse around him, he might well imagine himself in the midst of an ocean—only that the billows that roll over it are green instead of blue. These plains, in aboriginal times, furnished food for buffaloes, elks, antelopes, and other animals that feed on herbage, the whole mass moving continually to and fro over the vast expanse as the season changed, or as the state of the pasturage invited them to new fields.

THE NORTHERN ATLANTIC SLOPE.

The most important part of the whole territory represented on the map, in a historical point of view, is the Atlantic slope, as it is called—that is, the portion of the country between the mountains bordering the valley of the Mississippi, on the east, and the sea. You will see by the map that this is a long and narrow strip of land. It is divided naturally into two portions. The stormy cape which is seen projecting into the sea about midway of the coast marks this division. To the northward of this there is a tract of land lying between the sea on the one hand, and the river which carries off the surplus water of the great lakes on the other. This is the northern part of the Atlantic slope, and it was the scene of many of the most in-

teresting events connected with the history of the country.

The country in this district is mountainous or hilly in every part. In former times it was covered with forests, except where the Indians had cleared small patches of ground, by burning down the trees, to make fields for the cultivation of maize. This tract of land was exactly adapted by nature for producing the grasses and other herbaceous plants, which form the food of the sheep, the horse, the ox, and other such grazing animals—the most useful of all to man. But no such animals were produced in this region. It would be impossible, indeed, that they should live here, in a state of nature, on account of the fact that, though in summer everything is favorable for the production of their food, in the winter, which season here lasts from four to six months in the year, the whole country is buried under the snow, and, of course, all such animals, if any there were, would perish.

Such animals are now, however, raised in great numbers in all this region. Indeed, they are the great staple of production. They feed themselves during the summer season from the grass that grows upon the hill-sides and upon the mountain slopes; while such as grows on the more smooth

and level lands below is husbanded for them by the farmer, by being cut, and dried, and stored in barns, and so fed out to them under shelter during the winter season, when the fields and hill-sides are all alike buried four or five feet under the snow.

NATIVE ANIMALS.

Thus, in its native state, there were no animals in this region except such as could provide themselves with food, or live without it during the protracted winters. The moose, with his long legs to wade through the snow, and his long neck and head to reach up to the branches of the trees and underwood, could live by browsing upon the buds and the tender bark which grows upon them. The squirrels and other such smaller animals were endowed with instincts which led them to lay up food for the winter in hollow logs or holes in the ground. The bears went into a torpid sleep in which they remained insensible and without food for months at a time, and the minks and other burrowing creatures of that kind continued their operations under the ice and snow all winter long, feeding on roots or on fish; and whatever might be the severity of the cold above, finding it always warm and comfortable for them below.

MAN.

This northeastern region had its human inhabitants, too, notwithstanding the depth of the snow which covered it, and the intensity of the cold which prevailed during so large a part of the year. These inhabitants easily provided themselves with food during the summer season, partly by hunting and fishing, and partly by cultivating the ground in such spots as they had been able to clear of trees. They had a double resource in winter, too. In the first place there were the stores of provisions which, like the squirrels, they had laid up in the season of abundance, and then, even in the winter, the supplies which nature afforded them were not wholly cut off. For, although all above the surface of the earth, both of land and water, formed one lifeless and desolate expanse of frost and ice and snow, and was enveloped in an atmosphere so intensely cold that no active vegetable or animal life could endure exposure to it, still beneath this surface, both upon the land and upon the water, there was a protected stratum teeming with life in every form, and there were a thousand ways which their savage ingenuity devised of penetrating to this stratum, and drawing from it at least a portion of their needed supplies.

All this, however, will be more fully explained in a subsequent chapter.

THE SOUTHERN ATLANTIC SLOPE.

To the south of the stormy cape represented on the map, and between the mountains and the sea, is the southern Atlantic slope, of nearly the same size and form as its northern counterpart, but extremely dissimilar in character. It consists mainly of level plains, covered, in a great measure, with forests of pine; and across these plains innumerable rivers flow from the mountains to the sea, through valleys of the most extraordinary richness and beauty. In this country the grasses do not grow, but their place is filled by tropical plants. The two chief plants that have been cultivated here are rice and cotton.

CHARACTER OF THE COAST.

One very curious and extremely important result of the difference of the conformation of the land in the northern and southern portion of the Atlantic slope, is a great difference in the accessibility of the coast in the two sections. Where a district of country is mountainous and rocky, the shores are usually bold, and the indentations in the land are filled with deep water. The rivers, too,

in flowing through such a country, are bounded generally by steep and permanent banks, which yield but little sand or soil, to be borne away by the current of the stream. The rivers are consequently more likely to be deep, and their mouths to be comparatively unobstructed.

On the contrary, where a coast is low and sandy, it is undermined and washed away by the waves, and shoals and sandbars and low islands are formed all along the line of it. The rivers, too, in flowing through such a country, undermine and wear away the banks, and bring down great quantities of sand and gravel to fill the beds of the rivers, and choke up the entrances at their mouths.

These causes operate powerfully in the two portions of the eastern coast of this country. The shores in the northern portion are bold and permanent, and almost every considerable indentation in them forms a deep and safe harbor for shipping. In the southern portion, on the other hand, the coast is lined with shoals and sandy islands; and although there are numerous inlets and bays between and among them, they are almost all shallow, and the approaches to them are choked up with continually shifting sands.

It is so with the rivers. The Hudson river has one-third greater depth of water at its mouth than

the Mississippi, although the Mississippi reckons twice as many *thousands* of miles as the Hudson hundreds, in its length, and discharges, doubtless, into the sea, judging from the area which it drains —more than a hundred times the quantity of water.

From these causes the northern coast is much more accessible to ships coming from sea than the southern, and to this advantage, doubtless, and to the facilities for commerce resulting from it, it is owing, in some considerable degree, that so many early settlements were made on the shores of the northeastern slope, and that the section of country lying contiguous to them has made such rapid advances in wealth and population.

THE WESTERN SLOPE.

If we pass now across the country to the western slope, we see a range of mountains running parallel with the coast at a comparatively short distance from the sea. This chain of mountains was named by the Spaniards who first explored the country the Sierra Nevada, which means snowy chain. The strip of land which lies between these mountains and the sea is too narrow to produce any considerable rivers. One, however, is seen crossing the chain of mountains, flowing through a gap

or gorge, left, it would almost seem, on purpose to allow a passage. The mouth of this river forms a deep and spacious harbor, the only one of importance upon the coast. It is this harbor that has given rise to the city of San Francisco.

THE GREAT SALT DESERT.

There remains one more district, and that a most remarkable one, to be described. It is the great desert which lies between the Snowy Chain and the range of mountains which bounds the Mississippi on the west. The desert character of this tract arises, it would seem, from the scarcity of rain, and from the sandy and porous character of the soil, which causes all the water that falls upon it to be absorbed so suddenly that it cannot serve the purposes of vegetation. Streams rise in the mountains around it, and some of them, by the confluence of tributaries, become quite large rivers in going down into the valley. But in flowing over the great sandy waste which here receives them, the water is rapidly absorbed. The streams grow smaller and smaller as they go on, and finally disappear. In the spring of the year, when the snows melt, or in times of great rains, these rivers are swollen so as to extend in length a hundred

miles or more, but even at such times they finally dwindle away and disappear.

Some of the rivers, however, before they disappear, reach great hollows or depressions in the land, which depressions, of course, they fill, and thus are formed lakes. The smaller of these lakes, in summer, dry up and disappear, leaving only salt incrustations upon the ground; others being larger, are permanent. There is one, the Great Salt Lake, which is some hundreds of miles in extent. The water from these permanent lakes is, of course, all the time infiltrating into the sand below, and evaporating into the air above, but before the whole quantity is exhausted, the rains upon the mountains send down a fresh supply, and thus the vast reservoir is never wholly emptied.

THE DEPOSITS OF SALT.

There is one very curious phenomenon which occurs throughout this region, and that is the tendency to deposit salt, which the waters indicate. The great lake, as its name denotes, is salt, and saline incrustations are found upon the ground in various places where lakes and pools have dried away. It is found to be a general law, though perhaps not universal, that wherever lakes exist that are fed by rivers or other streams flowing over

the surface of the ground—and not by springs—and which have *no outlet to the sea*, they are salt. There may be exceptions, but this is the general law.

For a long time the cause of this phenomenon was enveloped in great mystery, but this mystery has at length been solved. It is found that the earth contains, and continually produces saline substances in the soil. The rain falling upon a district of country dissolves a portion of these substances, and they are borne away by the water into brooks and streams. The quantity is too small to affect the taste of the water while it is in this condition, and so we call the water fresh, and it continues fresh until it reaches the sea.

If, however, it never reaches the sea, but like the water that comes down from the mountain sides into the great American desert it spreads itself out into lakes and pools, and there evaporates, the salt then becomes concentrated so as to manifest itself very decidedly to the taste, and to the other senses. For in the process of evaporation it is the water only that is taken up into the air. The saline particles which it contained are all left behind. Thus the saline element accumulates. Every fresh rain brings down an exceedingly small, it is true, but still an additional supply; and as nothing

is taken away, the quantity, after the lapse of ages, becomes very great. The Dead Sea, which is isolated in this manner, and has been for thousands of years receiving a small continual supply from the saline substances which the Jordan and its branches have washed from the soil, has become more salt than the ocean.

THE DIGGERS.

The great desert valley which lies thus between the Rocky Mountains and the Snowy Chain of the Pacific, is not wholly desert and uninhabited. There are regions on the mountain sides and in the valleys in which a scanty vegetation thrives, and where reptiles and other animals of a humble order are produced. There are even tribes of Indians low and degraded enough to be fitted to these gloomy and desolate abodes. They are called Diggers, from the fact that they obtain their subsistence by digging into the ground for roots and for snails and reptiles of every kind.

CLIMATE OF THE COUNTRY.

For nearly six months of the year, throughout the whole breadth of the continent from east to west, the polar cold, following the sun as he withdraws during that season of the year beyond the

equator to the south, comes down from the Arctic regions, and envelopes all the northern half of the country in ice and snow, and then, during the remaining six months, the returning sun brings back warmth, and with it spreads verdure and beauty again over the whole.

During the winter season, all along the northern frontier, the snow in the forests lies often for months at a time four and five feet deep, while the ice is at least half that thickness upon the rivers and ponds. The intensity of the cold of course rapidly diminishes in advancing to the southward, and along the southern frontier it is very seldom that either snow or ice is seen.

It is a singular circumstance that the difference of the temperature at the different seasons of the year is very much greater on this continent than on the other. There is about twice as great a difference between the average heat of summer and winter in Quebec as at Paris, it being here much warmer in the one season and much colder in the other. In Scotland the summers are not warm enough to ripen grapes or Indian corn, and yet in the winters the sheep can feed in their pastures almost without interruption during the whole year. In the corresponding region on this side of the Atlantic, while the rays of the summer's sun are suf-

ficiently concentrated and continuous to ripen the grapes and the corn, the winter's cold is so intense that, for six long months, the sheep and cattle have no access to the pasturage at all, the whole surface of the ground having become solid as a rock, and being also buried many feet under the snow.

RECAPITULATION.

Look now once more upon the map and take a general survey of the country which it represents, by way of fixing the great leading features of it upon your mind. There is the lake country at the north, covered with forests, and the summit level occupied by four great inland seas, which pour their waters down over the precipice of Niagara into the lowermost lake, and thence flow off in a north-easterly direction into the ocean. South of this is the great Mississippi Valley, occupying almost the whole interior of the country, and displaying a vast net-work of rivers which, collecting the waters of the whole region, brings them all together into the center of the valley and carries them through one immense channel southward into the sea. By the side of this valley to the westward is a great dry and barren basin, bordered by mountains on every side, and with no rivers except such as are formed by streams coming down from the moun-

tains after rains, or from the melting of the snows, and are soon absorbed by the thirsty sands. These two great basins occupy the center of the continent.

To the westward of them is the narrow strip which forms the Pacific slope, between the mountains and the sea, and to the eastward of them is the Atlantic slope, level and plain in the southern part, but mountainous and rugged toward the north.

These are the great leading features of the country, which it is necessary to keep distinctly in mind in studying its history.

CHAPTER III.

REMARKABLE PLANTS.

DISTINCTION OF INDIGENOUS AND EXOTIC.

A PLANT that grows originally in any locality as a native of it is said to be *indigenous* to that locality. Those which have been brought to it by man, either by accident or design, are *exotic.* Thus the orange tree that grows in a pot or a tub in a lady's parlor in any northern part of America is an exotic; so is the wheat that grows in the farmer's fields—both plants having been brought to that locality by man. But the Indian corn, or maize, as it is more properly called, is indigenous, that plant being, so far as is known, a native of the country.

Of the numerous plants found growing in America at the time it was discovered by Europeans, some very strongly resembled plants of the same class growing in the old world, though different in species from them. There were others, however, that possessed characteristics almost wholly new, and some of them soon began to attract great

attention. Among these may be named the cotton plant, rice, the tobacco plant, the potato, and maize.

THE COTTON PLANT.

Man is the only animal needing clothing that is not furnished with it by nature, but he is provided instead with the faculty of clothing himself, and one of the most striking of the marks of design, and of the adaptation of a want to a supply, which we find everywhere around us, consists in the provision which is made for furnishing him with materials for this work.

In all the cold regions of the earth there are the skins of beasts at hand in great abundance, covered with warm wool and fur, ready for his use. In all the warm regions are the cotton plants.

MANY SPECIES.

There are a great many different species of cotton plants in the world, each great tropical district producing its own kind. These different species are very unlike in many respects, and cannot be changed into one another by the influence of climate or soil, or by different modes of cultivation. They all agree, however, in this, that when the seed is ripe the capsule bursts open, and pre-

sents a white fleecy tuft to view, inviting the naked savage, as it were, to come and spin and weave himself a garment with it.

THE SAVAGE AND THE COTTON.

Savages have in all ages and in every clime shown themselves ready to accept the invitation, and in Egypt and India, and in many tropical islands of the sea, cotton has been spun and woven from periods long antecedent to any records of history.

America, too, it was found, very soon after it

was discovered, had its cotton plants, and cloth made from the little fleeces which they bore was worn by the natives in all the tropical regions. Specimens of the cloth have been found in some ancient tombs in South America, showing that it has been in use here from a very ancient period. In the colder regions the plant did not grow. Here the natives were compelled to content themselves with the skins of beasts, and with such fabrics as they could make from the fibrous bark of trees.

THE SEA ISLAND COTTON.

The name of the genus that comprises all the species of cotton plants is gossypium. Some of the species which were found in America proved to be superior to any others previously known. There is one species, in particular, which was found in some of the West India Islands, and was brought to the United States in 1786, and is now cultivated on the low and level islands lying along the southern coast, that we described in the last chapter, and which is far more valuable than any other found upon the globe. Its superiority consists in the fineness and softness and length of the fibre. It will not grow anywhere and retain its qualities except on low rich land along the sea shore, and it

thrives best upon the islands above referred to. It is called on that account sea island cotton.

The fibres of cotton, seen under a powerful microscope, appear like long ribbons, perfectly smooth and continuous from beginning to end. They are transparent, too, though the reflection of the light from so many countless millions of them when they lie together gives the whole mass a white appearance, just as a mist or fog appears white while the sun shines upon it, although it consists of millions of drops of perfectly pellucid water.

COTTON INTENDED FOR THE CLOTHING OF MEN.

It is not known that the tuft of cotton is of any advantage to the seed which it envelopes, or that it fulfills any other useful purpose in the economy of the plant. It would seem that it was expressly intended for the clothing of man, just as the fruits and the grains which other plants produce were intended for his food. There is this difference in the two cases, however, namely, that while the fruits and grains have a useful purpose to accomplish in respect to the plants which produce them, as well as being available for the purposes of man, the little fleece which envelopes the seed of the cotton plant seems, so far as we know, not to be necessary to the plant at all, thus leaving us to in-

fer that nature produces it with very special, if not exclusive, reference to the wants of man.

The birds in the countries where it grows make great use of it too to give a soft and downy lining to their nests.

RICE.

Several species of rice were found indigenous to America. Rice is the most productive food-bearing plant, for the use both of men and animals, that is known. It grows wild in the water in low and swampy lands along the borders of the rivers in tropical countries. Countless millions of birds gather over all the region where it grows in the season of its ripening, and multitudes of other animals, such as gain access to the ground when the water subsides, live upon it.

The Indians used to gather it by sailing in through the midst of it in their canoes, where bending down the heads of the rice, they would beat off the grains into the boat by means of a sort of threshing stick made for the purpose.

MAIZE.

The most important and valuable plant, however, for the American Indians, especially for those who lived beyond the limits of the rice

GATHERING THE WILD RICE.

country, was the maize, or Indian corn. A great many of the tribes cultivated this plant in fields which they cleared for this purpose, by digging around the roots of trees and burning them off. Such fields were very numerous in the northern parts of the country when it was first discovered by white men. Indeed, this plant seems to have been their chief reliance for vegetable food. They considered it as the special gift of the great Spirit, and it figures very conspicuously in all their traditionary legends in respect to the creation of the world, and the early history of the human race.

AN INDIAN TRADITION.

One of these legends is as follows :—

The first men who were created, says the tradition, proved to be bad men, and the Great Spirit, finding them to be incorrigible, destroyed them all by drowning them in a great lake.

This story of the destruction of the first race of men by water is supposed by some to have originated in a tradition of the general deluge described in the Sacred Scriptures.

After having thus destroyed one generation, the

Great Spirit created another man, and finding, after he had lived alone for some time, that his condition was too solitary, he made him a sister. The brother and sister lived together quite happily for a while, when at last one morning the brother said that he had had a dream.

Five young men he saw in his dream, he said, coming one after another to see his sister, desiring her in marriage. She rejected the first four and accepted the fifth. This was a token, he thought, that if such young men should come she was to refuse the four first and accept the last. His sister said that she would do so.

In a short time the young men began to come. The first was named Tobacco. This was, however, before any such plant as tobacco was known.* The young lady refused his suit, and he immediately fell backward and died.

Next came a young man named Bean. He, too, was refused, and fell back and died like the other.

The next one was named Pumpkin, and the next Melon. They both met with the same fate as their predecessors. All fell backward when they found themselves rejected, and died.

* We use here the English names of the plants referred to. Of course in the original legend the Indian names are given.

Finally the fifth young man came. His name was Maize. The girl smiled upon him, and gave him her hand. They were married, and from them proceeded all the subsequent generations of the human family.

From the ground where the bodies of the others lay buried there sprang up the several plants bearing these persons' names, the tobacco, the pumpkin, the melon, and the bean.

The narration of this legend here answers the double purpose of showing how important a place in the estimation of the Indians the maize plant occupied as an article of food for them, and also of giving an example of the traditionary tales which have come down from former generations in respect to the origin of the human family.

THE DISTINCTION OF EXOGENOUS AND ENDOGENOUS.

The maize plant brings to our view one of the greatest and most important distinctions that appear in the vegetable world, that of *exogenous* and *endogenous* plants, or, as they are sometimes termed, EXOGENS and ENDOGENS.

The word exogenous means *outgrowing*. An exogenous plant is one that grows by successive layers deposited at intervals beneath the bark upon

the outside of the stem, as is the case with nearly all trees and shrubs that grow in cold or temperate climates. They all have a pith in the center and a bark upon the outside, and the wood of the stem between is formed by layers deposited in succession immediately beneath the bark.

An *endogenous* plant, on the other hand, grows by a uniform expansion of the whole substance of the stem within. It has no pith and no bark. The external surface is hard, however, and smooth. It is sometimes even glossy. The maize is perhaps the largest specimen of an endogenous plant which grows in northern latitudes. Very large specimens grow in tropical regions. The date, the bamboo, the rattan, the sugar cane, and various other canes, such as those used for fishing poles, are all endogenous. Indeed, this is the prevailing type of tropical vegetation, and the fact that maize is of this character seems to indicate that it is of tropical origin.

It is a very curious circumstance that the seeds of all exogenous plants have two lobes, while those of endogenous plants have only one. The lobes of a seed are by the botanists called *cotyledons*. Hence the class of endogens are sometimes called *monocotyledonous* plants, while that of exogens are called *dicotyledonous*. What connection there

should be between the single cotyledon of the seed and the peculiar character and growth of the endogenous plant, its hard and shining outside surface, with no bark and no successive layers of wood, and on the other hand between a two-lobed constitution of the seed, and a bark, a pith, and a growth by successive outside layers, is a profound mystery. That there is some latent connection, however, is sure, for the two distinctions correspond with each other throughout the whole domain of the vegetable world.

In some plants, as in the bean, for example, the two cotyledons of the seed come out of the ground when the seed germinates, and appear above the surface in the form of two thick oval leaves. The division exists, though it is not so apparent in the seeds of all bark bearing trees, shrubs, and herbs of every kind.

THE TOBACCO PLANT.

Perhaps the most extraordinary of all the native American plants, considered in respect to the influence which it has exerted, and the effects which it has produced in the world since the discovery of America, is the tobacco plant. The attention of the Europeans was called to it almost from the outset. Columbus, when he first landed, sent some

messengers into the interior on an exploring tour, and on their return, among other things that they reported, they said that they found the natives smoking little rolls formed of the leaf of some sort of plant. One end of these rolls, they said, the people put into their mouths, and thus drew the smoke in from the other end which was lighted.

The plant was afterward found to be a narcotic, that is, to have the power of producing a sleepy and dreamy sensation when taken into the system. There are a great many plants produced in other parts of the world, the effects of which upon the system are narcotic, but those of the tobacco plant are peculiar. They are far more agreeable, and perhaps less injurious—so they say at least that use it—than those of any other narcotic plant.

It was, however, sixty or seventy years after the time that the attention of Columbus was first called to the plant before it was known in Europe. During all this time, though its existence and its effects were known to travelers visiting America, the use of it was regarded as a repulsive habit of savages, not to be imitated by civilized men. At length, in the year 1560, a small quantity of it was sent across the Atlantic to a certain Flemish merchant, and he sent a portion as a curiosity to the French

minister at the court of Portugal, at Lisbon. The name of this minister was Nicot.

Nicot presented some specimens of the tobacco to the king of Portugal and to other distinguished personages, and they made trial of its effects. They were all so much pleased with the dreamy exhiliration which it produced upon them that they sent for more, and in this way it was soon introduced into Europe, where its fame spread with great rapidity. A very strenuous opposition arose to the use of it at the same time, and kings and governments, both civil and ecclesiastical, made earnest efforts to suppress it, but all in vain; and it has since, as is well known, become one of the most widely extended articles of consumption, and the most important in its effects, either for good or for evil, that the vegetable kingdom produces for man.

THE HABIT OF USING TOBACCO.

This is not the place to discuss the character of these effects. All that I shall say is, that those who escape forming the habit of using tobacco in their youth, always, I believe, rejoice, through all the subsequent years of their lives, in their exemption from what is at best an inconvenience and a peril; while those who form the habit often spend

their lives in fruitless and vexatious efforts to escape from the thralldom of it, and seldom or never recommend to others to follow their example in acquiring it.

BOTANICAL NAME.

The botanists, when they came to procure specimens of the different species of the plant, and to add it to their catalogues, gave to the genus the name Nicotiana, from the name of the French minister, who was the first to bring it into notice in Europe. There is a substance, too, which is extracted from the plant, which has a name of the same derivation, *Nicotine*. Nicotine is very abundant in the leaves of the plant, and is one of the most virulent poisons known.

THE POTATO.

The potato is another very remarkable plant which was introduced into Europe from America, and which has exerted a vast influence—though in this case the influence is a wholly salutary one—upon the condition of mankind. It is supposed that by providing a cheap and abundant sustenance for the lower classes of people, it has actually added many millions to the population of Europe.

It came in the first instance from South Amer-

ica, and it is said that originally the tubers of the plant were very small, and far less nutritious than they are now. The change has been produced by cultivation. It is always found that when man selects any plant growing in a state of nature, and takes it under his care, with a view of using it for food, nature comes forward to meet him, as it were, and aid him in his effort, by giving the plant so chosen a new and fuller development in respect to the qualities which fit it for his purposes. Thus the apple, which was small, hard, and sour in its native woods, becomes large, tender, sweet and juicy when man chooses it for his food, and transfers it to his gardens. Similar changes take place in the grape, the peach, the pear, the potato, and in almost all other plants that produce food for man.

When, therefore, a new plant is discovered in some remote and partially explored country, it is not always easy at first to decide upon its value, for it is not known what effect cultivation will have upon it. There is a very important society in France, called the Society of Acclimation, the object of which is to bring new plants and animals from remote regions of the earth to Paris, with the view of ascertaining by experiment what the effect of a new climate and artificial culture will have

upon them. Several important discoveries have already been made by this society, and it is prosecuting its researches with increased vigor, and on a more and more extended scale every year.

The potato met with almost as much opposition at its first introduction into Europe as tobacco. The opposition in this case, however, was found to be a prejudice, arising simply from the fact that the plant itself and the use of it for food were something new. The poor people especially would have nothing to do with it. It was a food fit only for beasts, they said, and they were determined that it should not be forced upon them. These prejudices have long since disappeared, and the once despised tuber is now a universal favorite all over the civilized world.

THE MAGNOLIA.

When the European discoverers first landed upon the American shores, the grandeur and beauty of the native forests seem to have impressed them more than anything else that they beheld. Among the trees which chiefly contributed to this magnificence was the magnolia, which was found growing very profusely in all the southern regions of what now form the United States. Some species of this splendid class of plants grow in the

Middle and even in the Northern States, but in this latter locality they are rare.

The magnolia *grandiflora*, so called, when in perfection, is one of the most magnificent trees in the world. It grows, it is said, sometimes to the height of seventy feet. Its leaves are evergreen, and are polished on the surface, and at the proper season of the year the whole tree is covered with a profusion of immense white flowers, which bloom so conspicuously in the midst of the masses of verdure which surround them as to strike the eye of the stranger with wonder and delight.

There are a great many different species of the magnolia in America, which vary much in minor particulars, such as in the size of the plant itself and in the magnitude and fragrance of the flowers. There is one species which bears leaves two or three feet long, with flowers the cups of which are sometimes nearly a foot in diameter. The flowers of most of the species are very fragrant, some of them so much so that a tree, it is said, will scent the air for a distance of three miles. In some of the species the plants are small and shrub-like in form, but still producing flowers of extreme fragrance and beauty. There is one which is called the beaver laurel, which bears leaves and flowers of extreme elegance, and diffuses a fragrance so strong

that it perfumes the atmosphere for a great distance around.

Since the discovery of America various species of the magnolia have been transplanted to Europe, and cultivated there in botanical gardens and in private pleasure grounds, where they are regarded as great curiosities. None of them were known in Europe until they were carried thither from America, but since that time it has been found that some species of the plant occur in China and Japan, though they are not identical with any of those found in the new world.

THE MAHOGANY TREE.

Next to the potato, which has so largely increased the means of sustenance for the masses of the population in Europe, and the cotton plant, which supplies so many millions with clothing, perhaps the most useful of the native productions of the American soil, in respect to the welfare and enjoyment of mankind at large, is the mahogany tree. This is a very large forest tree, which grows in vast numbers in the West India Islands and in certain parts of Central America. It is characterized by a certain combination of qualities which render it superior as a material for making furniture, and for cabinet work in general, to any other

wood in the world. These qualities are its beautiful color, its hardness, making it susceptible of a fine polish, and the *stability* of its fibers, that is, its freedom from all tendency to warp, shrink, or split. It grows moreover in very massive trees, from which planks of almost any size may be sawed, and logs of it, containing vast quantities of the wood, can be cut and transported with great facility. Wood has thus sometimes been procured from a single tree to the value of four or five thousand dollars.

It was more than two hundred years after America was discovered before mahogany began to be introduced into Europe as an article of consumption, but now it is universally employed there, and the demand for it is so large that the British maintain extensive settlements in Honduras, solely for the purpose of cutting and shipping it.

The work of cutting the trees and floating them down the rivers to the sea is performed by the natives of the country, acting under the superintendence of Europeans. These natives work in gangs of thirty or forty together. When a tree has been selected to be felled, they build a staging against the side of it, ten or twelve feet from the ground—the part of the stem below that point not being valuable. The tree is then cut through just

above the staging, and when it has fallen the branches are lopped off, and the stem is divided into suitable lengths for convenient transportation. The logs are floated down the little streams on the banks of which they grew to the larger rivers, and are there made up into rafts, which, guided by skilled raftsmen, are carried down by the currents to the ports whence they are to be shipped to foreign countries. Some of the logs thus transported are of immense size and of great value.

Such are a few of the most characteristic and celebrated American plants that were brought to the notice of mankind after this continent was discovered. In the next chapter we shall consider some of the most remarkable animals.

CHAPTER IV.

REMARKABLE ANIMALS.

THE BEAVER.

One of the most remarkable of the animals found in America is the beaver. Species nearly resembling the American beaver formerly existed in the old world, but they have long been nearly or quite extinct. The *class* of animals to which the beaver belongs is common all over the world, namely, the class of Rodentia, which means gnawing animals. The beaver is the greatest gnawer of them all.

THE BEAVER'S TEETH.

His cutting teeth are broad and flat, and are brought to so sharp and hard an edge that the Indians were accustomed to set them in handles and use them for cutting instruments before they obtained iron and steel from the Europeans. It is said that by means of these teeth the beavers can cut off a stem in the woods as big as a walking stick at a single bite. By more continued efforts

they can fell trees of very considerable size, not greater, however, than eight or ten inches in diameter, though one trapper in the service of a fur

THE BEAVERS AT WORK.

company says he has seen trunks eighteen inches in diameter cut through by them.

FAME OF THE BEAVER.

The beaver has acquired a very extensive fame among mankind, the foundation of which is two-fold. First, the exceeding softness and richness

of his fur, which made his skin very valuable as clothing to the native tribes before Europeans came to the country, and which have since caused it to be still more highly valued by civilized nations all over the world; and secondly, his distinguished reputation as a builder. Both these characters of the animal result from the same cause, namely this, that he is intended to live in a very cold climate, that is, a climate which is very cold for half the year, and to get his living from the roots of plants growing under water, which, during the cold season, is covered with ice from one to three feet thick. To meet these exigencies he is provided with an extremely thick and soft fur to protect him in his winter excursions upon the land, and with certain very remarkable building instincts, by which he is enabled at all times, however cold the weather and however thick the ice, to procure access to the water.

HIS SYSTEM OF BUILDING.

The first object of the beaver in his engineering operations, is to keep the water deep in the stream that he inhabits, in order to prevent its freezing to the bottom. To effect this he forms a company, and the whole band proceed to build a dam. They gnaw down trees and bushes and drag them

into the stream at the place which they have chosen for the dam, and pack them together in a close and impenetrable mass ten or twelve feet wide at the bottom, and diminishing gradually to the top. As they proceed they fill up all the interstices of the work with stones, gravel, mud, turf, roots, and everything else that they can bring. Of course a great deal of their work is washed away by the current while they are building, but by means of their indomitable perseverance, they finally succeed, and a massive and permanent obstruction to the stream is created. In process of time the trunks and stems of trees which they have introduced into their work decay, and the whole settles and consolidates into a permanent bank, which endures sometimes for centuries. Of course, so long as the pond is occupied the dam needs constant watching and frequent repairs, but this work the company always attend to in the most prompt and systematic manner.

In laying the materials of which the dam is composed the beavers go continually to and fro over their work, trampling down the soft substances with their paws, and patting them with their broad flat tails. This patting motion of their tails, which they make instinctly when they walk about upon the ground, gave rise to the story that

the beaver uses his tail as a trowel. This, though it is not literally and exactly true, is, after all, not far from the truth, for the effect of the patting is analogous to that produced by the trowel of the mason in laying stones in mortar.

THE HOUSES.

Besides the dam, the beaver builds what may be called houses on the bank, where he can live during the winter sheltered from the cold, and protected from the wolves and similar wild animals that would otherwise prey upon him. These houses are built of logs of wood formed from the trunks of trees, which the beavers gnaw down in the adjoining forests, and then cut to proper lengths for their purpose. They dig in the ground to get good foundations, and then build up walls four or five feet high, much in the same way as they construct the dams. They then lay other trunks of trees across from one wall to the other, and cover the roof thus formed with stones, bushes, moss, mud, and other similar materials, and smooth the whole over at last with their paws and their tail, so as to make a sort of mound of their work, with a hollow in the center. The whole structure is so solid, and all its parts so closely compacted together, that the wolverines and wild cats cannot get in. It is

very difficult even for men to break through such a solid mass.

From these habitations subterranean passages run in various directions—some opening into the pond under the ice, so as to afford the inhabitants free access and egress to the water at all times, and others lead to holes and caverns which the animals make as places of retreat from their enemies when they are alarmed, and perhaps for warmth in times of extreme cold.

WORKING HOURS.

It is a very curious circumstance that the beavers do all their work in the night, and thus no person can watch them at their operations except at a great disadvantage. In the day time they keep very quiet. Their motive, probably, in thus arranging their time, as far as action prompted by such animal instincts may be said to have a motive, is doubtless to avoid attracting the attention of their enemies.

The beavers were once very numerous throughout the whole northern portion of the territory now occupied by the United States. In all the settled parts of the country, however, they have nearly or entirely disappeared; and so valuable are their skins, and so closely do the hunters and trappers

follow up the work of taking them, that it will not be many years, if the present state of things continues, before the whole race will be completely exterminated.

OTHER FUR-BEARING ANIMALS.

Besides the beaver, there are a great many other fur-bearing animals, such as the mink, the otter, the sable, and others that live on the banks of ponds and streams in America, and, like the beaver, seek their principal food in the water. There are none of them, however, that build either dams or habitations. Perhaps this is because they are smaller, and can more easily find space enough under the ice for their fishing and foraging excursions, without resorting to artificial means to keep up the water, and can also more easily find or make holes in the ground sufficient to furnish them a safe retreat from the cold, and a refuge from the hostility of their enemies.

These animals all produce fine and valuable furs, and are caught every winter by the trappers and hunters in great numbers, especially in that wide region of cold and desolate country which extends northward from the American frontier toward the pole, and which would be almost valueless to men, except for these productions.

CURIOUS PHENOMENON.

There is one thing very curious about this class of animals that get their living in a great measure under water, and are consequently obliged to be often submerged, even in the coldest winter weather, and that is, that their fur becomes very little wet by such immersion. A dog, after plunging into a river, comes out wet to the skin, but the fur of a beaver or a mink, on account probably of some oleaginous substance with which it is dressed, does not allow the water to penetrate, so that, after swimming across a stream, or burrowing among roots at the bottom of a pond, the animal seeks the bank again, and comes out with only the outer surface wet, the skin beneath being as dry as when he went in. Thus, when swimming in the coldest water he is never cold.

THE BUFFALO.

The buffalo, or bison, is a sort of wild bull, with a monstrous shaggy head and ferocious aspect. They are gregarious animals, that is, they live and feed together in immense herds. Almost all animals that feed on grass and herbage are gregarious, while beasts of prey are generally solitary in their habits. It is necessary for them to be so, for in order to succeed in their hunting, they must prowl

about alone, or watch in ambush, patiently and in silence, for their prey. There are some exceptions, as in the case of wolves, for example, which usually hunt together in packs. There is a reason for this exception, too, for the wolves live generally by killing and devouring animals larger than themselves, and so are obliged to combine their strength in order to overpower their prey.

The buffalos are gregarious by habit in order that they may the better defend themselves from their enemies; and so abundant is the food furnished for them by the luxuriant grass of the prairies, and so boundless is the extent of the plains over which they roam, that the herds increase to an almost incredible extent. Travelers sometimes find the whole region black with them in every direction as far as they can see. In one case that is described, the country was covered with a herd, or an aggregation of herds, so vast that the party journeying were six days in passing through them. The aspect which they presented with five, ten, and sometimes twenty thousand in sight at a time, spreading in every direction over the plains, some bellowing, some fighting, others advancing defiantly toward their supposed foes, and tearing up the soil with their hoofs and horns—the earth trembling under their tramp, and the air filled with a

prolonged and portentous murmur, presented to the view of the traveler a really appalling spectacle.

The bellowing of a large herd is sometimes heard at a distance of two miles!

ANNUAL MIGRATION.

Of course the frosts and snows coming down from the Arctic regions in winter bind up and cover large tracts of land which in summer are clothed with luxuriant herbage. The grazing animals, accordingly, move southward to great distances as the season changes. These migrations, in respect to the numbers and the solid mass of the moving columns, surpass in grandeur all other spectacles that the animal kingdom affords.

SWIMMING THE STREAMS.

The country being intersected by rivers and streams in every part, as shown by the map, would seem to interpose great difficulties in the way of the passage of the animals to and fro. The difficulties are great, but they are not insurmountable. The herd, on approaching a river, if it is fordable, descend the bank in a massive column, and wade or swim across. If the descent of the bank is not already gradual, it soon becomes so by the tramp-

ling of so many heavy hoofs, the most daring, of course, impelled partly by their courage and partly by the pressure from behind, going down first and breaking the way.

If there are calves in the herd, and the bank remains so steep that they dare not go down, their mothers always wait with them upon the margin, in great apparent distress, and make every effort to encourage them to go down. Sometimes it is said that the calves contrive to get upon the backs of the cows, and are conveyed in that way across the stream.

It not unfrequently happens that the landing proves not to be good when the animals arrive on the further side, so that instead of a hard beach by which to ascend to the level of the plain, they find themselves sinking into quicksands or mire. The scene which is witnessed in a case like this presents sometimes, it is said, an aspect almost awful. The older and stronger beasts are perhaps able, after long-continued and desperate struggles, in which they trample down and climb over the others in their excitement and terror, to regain their footing and clamber up the bank; but often many are unable to extricate themselves, and perish miserably—their bodies being borne away by the current down the stream.

CROSSING ON THE ICE.

The case is still worse sometimes when the river is frozen, and the herd is consequently compelled to cross upon the ice. The animals have no means of judging of the strength of the ice except by taking the opinion of the leaders, who go down cautiously, and step in a timid, hesitating manner upon the margin of it, and then if it gives no sign of weakness under the weight of a single tread, they conclude it to be strong and proceed. But it may be strong enough to bear one, while far too weak to sustain the weight of a hundred.

Still the whole herd follow on, and perhaps when the head of the column has advanced toward the middle of the stream, some cracking sound or other token of weakness gives the alarm. The leaders stop, the others press on, the ice becomes immensely overloaded, and presently goes down with a great crash, carrying hundreds into the water. Then ensues a scene of struggling and commotion and terror impossible to describe. Animals of every age and size are writhing and plunging in the water, vainly trying to climb up upon cakes of ice, or to force their way through the floating fragments to the shore—bellowing all the time with terror. Some at last gain the bank, but

others are swept away in great numbers beneath the unbroken ice below and drowned.

TRAILS.

In making their journeys the buffalos move in columns, those behind keeping in the track of those before, and in this way they make trails which soon become well worn; and being pretty wide, on account of the columns being formed with several animals abreast, they look like wagon roads. These roads extend, in some places, for hundreds of miles across the country. When they are once made, they are followed year after year by successive herds. In this respect the habits of the buffalo correspond with those of domestic cows in the pastures of New England, who lay out paths on the hill sides and in the woods, and continue to use them, when they are once worn, for many years.

USE OF THE BUFFALO.

The buffalo, as may readily be supposed, was a great resource to the Indians. His flesh furnished him with an abundant supply of excellent food. His skin served for cloth, and, when cut into thongs, for cords. His horns were made into vessels and implements of various kinds. Some tribes also made boats of his hide by stretching the hide,

when green, over a frame made of a suitable form for the purpose intended. This, of course, was a very clumsy sort of craft, but being made without any seam, was perfectly water-tight and very serviceable.

THE BUFFALO-SKIN BOAT.

The buffalo has many enemies, but the greatest of all is civilized man. So long as the vast herds were attacked only by bears, packs of wolves, and Indians armed simply with spears and arrows, they were able to hold their ground. The bulls of the herd, with their prodigious strength, and the for-

midable weapons with which nature has provided them in their horns, would maintain terrible conflicts with any of these foes, and would often come off victorious from the fight. But when the white man came, mounted upon a horse and armed with a rifle, no choice was left to him but to abandon the field; and in proportion as the tide of emigration moves onward toward the west, the buffalo retires before it, and will probably in time entirely disappear.

The frontiers, however, of his old dominion are drawn in very slowly and reluctantly, so that even the steamboat sometimes overtakes him. Cases have occurred in which steamboats, in feeling their way up some of the western branches of the Mississippi and Missouri, have come upon a herd of buffalos crossing the stream, and the poor beasts, in the midst of their amazement at the spectacle, have been shot by the rifles of the passengers from the deck.

There is one case mentioned in which a steamboat passed so near a buffalo swimming in the water that a passenger on board, who had learned the use of the lasso in South America, threw a rope, with a slip noose at the end, through the air and caught him by the horns.*

* See frontispiece.

The crew then pulled the poor beast alongside of the steamer, and, getting slings under him, hoisted him on board and butchered him for his beef.

THE TURKEY.

The turkey is one of the most valuable gifts made by the new world to the old. Until after the discovery of America no such animal was ever known in Europe, Asia, or Africa, though the forests and prairies of America were filled everywhere with flocks of these birds. The turkeys were accustomed to migrate to and fro from north to south, according as the food they lived upon was in season. In these journeys they marched on foot as long as they could keep the ground, only using their wings when there was a river to cross, or some other obstacle to be surmounted.

When they came to a river they used to pause long upon its bank before venturing to attempt the passage. They sometimes remained so for two or three days, during which time the old males would walk to and fro, strutting and gobbling with the greatest self importance, and with the air of being engaged in a deliberation of the utmost consequence to all the world.

At length, as it seemed, they would succeed in raising their courage to the proper point, and they would proceed to climb up to the topmost branches of the tallest trees growing near the river. There they would select their positions, and after a great deal more gobbling and strutting and innumerable false starts, they would commence their flight. The oldest and strongest birds would succeed in flying across the river before coming down to the ground, but the younger and feebler ones, especially if the river was wide, would fall into the water at a greater or less distance from the bank.

Then would follow a scene of floundering, scrambling and swimming, astonishing to behold, the result of which would be that the greater proportion of the flock would at last reach the land, though many of them would be carried by the force of the current far down the stream.

The value of the flesh of the turkey for food was soon made known to Europeans, and the bird is now domesticated, and has become very abundant, in almost every part of the world.

THE ALLIGATOR.

An alligator is an immense reptile of the lizard kind, which haunts the inlets, rivers, swamps and

lagoons of the southern States in great numbers. When full grown it is a very terrible animal, on account of its great size and strength. It is sometimes fifteen or twenty feet long. It crawls slowly on the land, but it can move through the water with great speed. Its body is covered with horny scales, which form a coat of mail that is proof against a musket ball. It is only near the head and shoulders that the skin can be penetrated by even a rifle bullet.

Of course the alligator is a very formidable animal, the more so from his having an immense mouth, which is armed with rows of teeth of terrible aspect. Generally, however, he is pretty quiet in his disposition, and is often seen lying harmless, basking in the sun, on the shores of his lagoon, or crawling slowly along through the canes and flags that grow out of the slime. But sometimes, for example at certain seasons of the year, or when he is hungry, or has been in any way irritated or disturbed, he is very ferocious, and in such a case he becomes a dangerous as well as an ugly enemy.

The alligator, like most other reptiles, is very prolific. Indeed, one great function that the animal seems destined to fulfill in the economy of nature is that of producing eggs and rearing young,

to be consumed as food by birds of prey. Only a small portion of its progeny survives the dangers which thus beset the period of their infancy.

The mothers make their nests in quite an artificial manner. They are built upon the ground, on the banks of lazy streams, or in the cane-brakes or marshes, and are of the form of great shallow cups, three or four feet in diameter. They are built of mud and grass, and a great many are usually constructed together, so as to form quite a village.

In these nests the mother alligator lays a great number of eggs, which she packs in mud, in several successive layers, one above the other, in the most singular manner. First she covers the floor of her nest with a sort of mortar which she spreads over it, made of mud and slime, and upon this lays one layer of eggs. This layer, when complete, she covers with another stratum of mortar, and over this lays another tier of eggs. The eggs have hard shells, and are somewhat larger than hen's eggs, and the monster lays so many of them as to build up her nest sometimes four or five feet high with these alternate layers.

When this work is finished the eggs are left to be hatched by the warmth of the sun, though the mother remains by them to guard them from the

attacks of the pilferers that are always at hand in great numbers to steal and devour them. It has been said that in thus guarding these deposits the alligators in some sense make common cause, so that when one of the mothers has gone away to seek food, the others who remain watch over and protect her nest, and it is with some instinctive idea of this advantage that they adopt the plan of building their nests together.

There are sometimes not less than a hundred and fifty or two hundred eggs in a single nest. Of these, however, but a portion are hatched, and still fewer of the young arrive at maturity. The young that are hatched are watched and defended by their mothers with great care, but they are exceedingly tender and helpless, and great numbers of them are seized and devoured by beasts and birds of prey.

The greatest enemy of the alligator, however, is man. In gradually advancing the settlement of the countries in which they live, he intrudes more and more upon their haunts, and as their size is too great to allow them, like other reptiles, to secrete themselves from their pursuers, their numbers are all the time continually diminishing, and it is not improbable that before many years they may entirely disappear.

The crocodile of the Nile is an animal of the same general character with the alligator, but is of an altogether different species.

THE EAGLE.

America is celebrated for its eagles. Indeed, one of the species, the bald eagle, so called, has been selected as the emblem of the national power. The eagles are all birds of prey, and they are remarkable for their size and the strength of their pinions. They seek their habitations on the summit of the various mountain ranges and on lofty cliffs overhanging the sea. From these elevated positions they survey vast regions of the air and watch for their prey. For this purpose they are endowed with powers of vision of almost incredible acuteness.

The eagle has always been held in high estimation by the American Indians, and his plumage has been prized more than that of any other bird for the dress and the decorations of warriors. This high estimation is derived partly from the warlike courage and propensities of the bird itself, and partly probably from the difficulty of taking him. Thus, eagles' feathers attached to a head-dress of a native chief, or ornamenting the shaft of a spear, were not only emblems of courage and strength

proper to signalize the martial spirit of the wearer as a warrior, but they were also trophies of the daring and skill which he displayed as a huntsman, in scaling the lofty heights where alone they were to be procured.

The eagle is very long-lived. Some specimens have been known to live from eighty to a hundred years.

COCHINEAL.

The forests of America produce a great many different woods which have been used extensively in dyeing, and for other similar purposes in the arts, but the most important pigment that has been derived from the productions of this country is cochineal.

The cochineal is an insect. It is of the form of a little bug. It is a native of Mexico. It feeds upon certain species of cactus. Immense numbers of these plants are cultivated in Mexico and Peru, for the sake of the insects that feed upon them. The work of collecting these insects, which is very slow and tedious, is performed by women, who go about among the cactus plants and brush the bugs off into a basket with a little brush made of the tail of a squirrel, or of some other animal.

The insects, when collected, are killed by being

thrown into boiling water, and then are carefully dried by being placed in ovens, or exposed to the sun. The article is then ready for market.

The cochineal insect produces a beautiful crimson dye, though a scarlet color can be obtained from it by a certain mode of using it. It is an article of very great value. Several millions of dollars' worth are annually exported from South America, and it is so precious that it is regarded in the markets of the world almost in the light of gold. Indeed it sometimes fulfills the functions of gold by being used for remittances and for making payments.

THE RATTLESNAKE AND HUMMING BIRD

There are two other animals that remain to be mentioned among those that are peculiar to America—animals that, however dissimilar in other respects, are alike in this, namely, that each is marked by a very striking peculiarity of the same general kind, while nothing at all approaching to either exists in any other part of the known world. These two animals are the rattlesnake and the humming-bird. The peculiarity which gives them special distinction is a power of producing a sound by the motion of a part of their bodies—the humming bird by its wings and the rattlesnake by its tail.

THE RATTLE.

The tail of the rattlesnake is provided with several joints, formed of a bony substance, and put together in a loose manner, so that when shaken they produce a rattling sound. Whether the design of nature in giving the snake this instrument is to enable it to warn other animals and men of the danger of coming too near, or for some other purpose, we can only conjecture.

There is a mystery, too, in respect to its venom. Some have supposed that this venom was given to it as a means of killing its prey before devouring it. Other serpents are endowed with the power of killing their prey by the prodigious force which they can exercise in coiling round the limbs of the animal they have seized, breaking its bones in the terrible gripe which they give it, and thus putting a sudden and total stop to all the vital operations. All serpents seem to require some extraordinary means of killing their prey, for they are formed to live upon animals much larger than themselves, and which they could not kill by any ordinary means.

There is a considerable number of species of serpents with rattling tails in America, but it is singular that there are none of any kind in the

old world. The whole tribe of rattlesnakes is an American production altogether.

THE RATTLESNAKE MORE SINNED AGAINST THAN SINNING.

Notwithstanding the hatred with which the rattlesnake is regarded and the opprobrium which is cast upon him by man, he seems, after all, to be more sinned against than sinning, for he really is a very quiet and peaceable beast, that has no quarrel with man, and never injures him unless he honestly supposes that he is called to do it in self-defense. If he sees a man coming toward him, he crawls quietly away, if a way of retreat is open to him. If not, and if his enemy still approaches with an aggressive air, he feels himself justified in defending himself by the only means with which nature has provided him. He winds himself up into a spiral coil, with his head projecting from the center of it, and as soon as his enemy comes near, he darts forward and upward, and strikes his fang into his enemy's flesh, at a point as high from the ground as he can attain.

HE ACTS ALWAYS ON THE DEFENSIVE.

He, however, seldom or never attacks man of his own accord, but warns him away by sounding his rattle when he sees him coming inadvertently near.

It results from this his peaceable disposition that, though the prairies in the western country, and the forests at the south, are full of rattlesnakes, numbering probably millions upon millions, and the slaves upon the plantations, and the farmers and emigrants and railway laborers in the woods, are continually encountering them, it is very rare that lives are lost from their venom. How great must be the forbearance, we might almost say the generosity exercised by the reptile, to lead to such a result as this!

This generosity, however, if generosity it be, seems to be very little appreciated by man. Man everywhere attacks and kills every rattlesnake that he sees. He strikes him on the neck with a club if he wishes to kill him at a blow; and if, on the other hand, which is more frequently the case, he wishes to tease and torment him for a while before putting him to death, or if he wishes to capture him, he comes with a forked stick, and sets the prongs of it into the ground, one on each side of the poor victim's neck. He then grasps his neck behind the stick with his hand and takes him up with impunity. It is even possible, while holding him thus, to extract his fang, or the little bag of poison at the root of it, and thus render him entirely harmless.

THE HUMMING BIRD.

From the rattlesnake, one of the most repulsive of all animals to man, we turn with pleasure to the humming bird, an animal that likewise owes a part of his celebrity to a sound that he makes, though the instrument with which he makes it is a pair of wings instead of a tail. Whatever of mystery there may be about the rattling made by the reptile, there is none in respect to the humming noise made by the bird. The sound is due simply to the rapidity of the vibrations of the wings, and this is due to the smallness of the bird. For the smaller the bird and the smaller the wings, the more rapid must be the motion of them to sustain the weight of the body in the air.

VIBRATIONS PRODUCING SOUND.

Sound is produced by the vibration of any substance in contact with the air, by which vibrations are imparted to the air, and thus transmitted to the ear. If the vibrations are slow no audible sound is produced. Thus the motion of the pendulum of a clock, the wagging of the tail of a dog, the motion of the hand up and down in the air, as rapid as it is possible to make such a motion, produce no sound.

As we increase the rapidity of such vibrations,

however, we at last come to a limit where a sound begins to be heard. This is about thirty-two beats in a second. The humming bird's wings, therefore, must move to and fro more than thirty-two beats in a second, and it is simply in consequence of the fact that his body and wings are so small that the rapidity of the motion of his wings comes within the limit above referred to, and sound is produced. The wings of a swallow make less than thirty-two pulsations in a second, and thus that bird moves through the air silently.

As the rapidity of the vibrations of any moving body increases the sound becomes higher in pitch. Thus the wings of a mosquito, moving much more rapidly than those of a humming bird, make a more acute sound. As the rapidity increases still more, we reach at last a point where sound is no longer produced. This limit varies with different ears, but with most persons it is at about *eight thousand vibrations a second* that sound ceases to be heard. This upper limit, however, is extremely vague.

The number of vibrations corresponding with the middle c of a musical instrument, according to the diapason recently established by the French government, is five hundred and twenty-two. That of a sound one octave below is half as great; of one

an octave above is twice as great. Thus by finding the pitch of the sound made by the wings of a humming bird, by means of a piano forte or other instrument, the number of vibrations made by them in a second can be approximately ascertained.

THE HUMMING BIRD'S MODE OF LIFE.

The humming bird is designed, like the bee, to feed on the sweet juices found in flowers. But being a bird, and thus, small as he is, too large and heavy to alight upon the flower and rest his weight upon it, he is provided with wings to poise himself in the air, and a long slender bill to serve as a pipe with which to draw out the juices from the innermost recesses of the largest corollas.

There are a great many different species of humming birds, all peculiar to America. None are found in any part of the old world. There is a difference in the form, and also in the plumage of the different species. In some of them the feathers, especially those of the neck and breast, are splendidly iridescent, glowing with all the colors of the richest gems. Nothing can exceed the beautiful effect of these colors when the bird is seen poised in the sun before the flower from which he is extracting the juices with his long and slender bill. At such a time his wings cannot be seen, so swift is their

motion; or if a glimpse of them is obtained, they produce only the effect of a little quivering mist at his sides. He seems like a wingless bird poised motionless in mid air.

If at such a time anything occurs to alarm him or to attract his attention, he darts off through the air a little way, quick as a flash, then suddenly stopping and poising himself upon his wings, he rests as motionless as if he were standing upon the ground. Then, after contemplating for a moment the object that alarmed him, he shoots off again through the air, with a motion so quick that the eye can scarcely follow him—and is gone.

Sometimes artificial flowers are made of the feathers of the humming bird, especially those taken from the breast—the different colors being arranged to represent the different parts of the flower. Nothing can exceed the gorgeous beauty of these imitations.

GENTLENESS OF DISPOSITION.

Humming birds are of a very gentle disposition, and they could be easily tamed were it not that they are of too delicate a constitution to bear confinement; and thus, whenever they are brought into the house and shut up in a cage or an aviary, they soon droop and die. While they are thus

kept they must be fed with fresh flowers, or else with honey, thinned with a little water.

They build their nests upon shrubs or upon the stems of vines or other climbing plants, not far from the ground, and the nests are so small that, when seen from a short distance, one of them might very easily be mistaken for a little tuft of moss, or a moss-covered knot upon the wood. There are two eggs only laid in the nest. They are white, and not much larger than peas.

These birds are very common in the West Indies and in all the tropical parts of America. A young English gentleman, who was about embarking for England, happened, just before he went on board his ship, to find a humming bird's nest with the mother upon it, sitting. He approached very gently to the place. The bird watched him anxiously, but she was too intent upon her duty to her eggs to fly away. The gentleman carefully cut off the branch and carried it, nest, bird, and all, on board the ship, intending to present his prize to a lady of his acquaintance on reaching his native land.

He fed the bird on honey and water during the voyage. She became quite tame, and continued on the nest until the little birds were hatched, but before the end of the voyage she died.

The little birds lived to reach the land. The gentleman presented them to the lady for whom the present was intended. One of them died very soon, but the other lived a month or two, and was so tame that he would put his bill to his mistress's lips and draw out honey and water from a little supply which she had provided for him there. It was to him just as if her lips had been the petal of a flower.

CHAPTER V.

THE INDIAN RACES

QUESTION OF THE ORIGIN OF THE DIFFERENT RACES OF MEN.

WHETHER it would seem more probable, judging by the light afforded us by the observation of nature alone, and without regard to the declarations of Scripture, that all the different races of men have descended from one common stock, or that each race had a different origin, and thus now forms a different species from the rest, is a question that has been much discussed by naturalists and philosophers.

In making these inquiries several considerations have operated upon the minds of philosophers to lead them to set out of the case the testimony of the Scriptures. In the first place, some of the most distinguished naturalists and philosophers do not believe in the divine authority of the Scriptures, but regard them simply as ancient writings, of great moral and historical value indeed, but yet not at all of infallible authority on any subject.

Others, who believe in the Scriptures as a revelation of the divine will, think that they are intended to guide us only in matters of faith and practice, and that it was not the design of the Holy Spirit, in inditing them, to teach us science and philosophy, but to leave us, in respect to those branches of knowledge, entirely to our own observations and studies in the field of nature itself.

There is a third class still, namely, those who think that while every inference which may be fairly drawn, even from the incidental allusions contained in the Scriptures, may be entirely relied upon as a truth revealed to us by divine authority, whatever may be the subject to which it relates, we are not to take these inferences with us, either to aid or restrict us, when we go forth into the field of the world as students of nature, but are to act independently, and avail ourselves of the lights of science and philosophy alone. They think, in other words, that the true object which we should have in view in studying nature is simply to learn what nature herself teaches, and that in doing this we must interpret what we see solely by the light of our own reason and reflection. We may distrust the conclusions that we come to, when we arrive at them, if we find that they conflict with convictions obtained in other ways, but in the process of

coming to these conclusions we must be guided honestly and entirely by what our observations of nature herself teaches, and by those alone.

DISTINCTION OF RACES.

There are four or five and perhaps many more distinct races of men upon the earth, each separated from the rest by very decided and apparently very permanent lines of demarcation. The differences are not merely those of color, or of any other external mark, but they relate quite as much to the internal organization of the individual, both bodily and mental. These different races are subdivided into many others, all marked by distinctive lines, more or less decisive and permanent. The great question for naturalists to solve has been whether, judging from the light of science alone, without any aid from the declarations of Scripture, we should conclude that all these different forms have descended from one pair.

Now, although, in coming to their conclusion on this subject, philosophers have set the authority of the Scriptures, for the time being, aside, it is remarkable that the conclusion which they have come to corresponds with and confirms the testimony of the Mosaic records; for the whole body of naturalists, with few if any exceptions, have concurred in the

opinion that the differences between the various races of men, great as they are, and permanent as they seem to be within the periods subject to our observation, are not *specific* differences—that is, that they are not such as, judging from observations made in other divisions of the animal world, imply a separate original parentage. In other words, that there is nothing in them which should preclude the idea of their all being descended from a single pair.

CAUSES OF THE DIFFERENCES OBSERVED.

It has been very common to presume, on the supposition that all the races of men were descended from a single pair, that the only causes which can account for the diversities of race which we now observe consist in differences of climate, of food, of modes of life, and of other such external influences as these. And some persons, after attempting to prove that such causes as these are not sufficient to account for changes so great, have inferred that all the races could not have descended from the same pair.

But there is another class of causes of a totally different nature from these, and far more powerful, which have undoubtedly operated very extensively in producing these changes. The existence of

them is well known, though the nature and operation of them is very imperfectly understood.

These causes are the hidden influences which produce those mental or bodily peculiarities which *are born with us*, in contradistinction from those which are subsequently produced by education, the circumstances of life, or external influences. A child whose skin is browned or darkened by playing in the sun is an example of one species of effect. A child *born* with a dark complexion is an example of the other kind.

The kinds of difference between parents and offspring of this *innate* character are very numerous, and sometimes very striking. A gentle and amiable father and mother may give birth to a very froward and irritable child. It is often the case, it is true, that such frowardness and irritability may be the result of bad management, but still there are cases where it is impossible to doubt that they have their origin in the inner constitution of the body or of the mind. In the same manner, parents who both have black hair and black eyes may give birth to a child with blue eyes and auburn hair.

We see the same differences spontaneously arising from births in the animal creation. There are black cats and grey cats, and tawny cats and white

cats, and yet nobody supposes that these differences are produced by differences of climate, or by any other external cause whatever.

IMPORTANT CONCLUSION.

We conclude from this that even if it were proved that differences of climate and other similar causes are not sufficient to account for the great diversities which prevail among the different races of men, it is very far from being proved, on that account, that these several races must each have had an independent origin. There are other causes, far more deeply seated and more radical and powerful in their action, which may have operated in addition to these, and perhaps in combination with them, to produce the results.

THE DISTINCTION OF RACE FIXED AND PERMANENT.

The differences which we observe in comparing the different races of men with one another, although we grant that they have resulted either from the operation of secret internal or of known external causes, or both, taking effect upon one single species which descended from one single pair, are still very great, and they are *fixed* and *permanent*. By this it is not meant that they are absolutely and perpetually permanent, for it is

obvious that the operation of the same causes which produced them may remove or reverse them, but only that they are permanent through any moderate number of successive generations, and not removable by means of any outward influences which man can bring to bear upon them. In other words, as they have not probably been produced by the operation of external causes which are under the control of men, so they cannot be removed by such causes.

The operation of outward influences, such as those of education and mode of life, will produce great effects; but such causes do not change the real and essential characteristics of the race. The Indian remains an Indian, and the African an African, under all the changes of circumstances to which he can be subjected, and in a vast majority of cases he approximates toward the characteristics of the Caucasian race only so far as Caucasian blood flows in his veins.

OBJECTION TO THIS VIEW.

Some persons are very reluctant to admit that any race of men is marked by a fixed and permanent characteristic of inferiority to the others, for fear that this will be made an excuse by unjust and wicked men for treating them oppressively and

cruelly; but there surely can be no justification for tyranny in the weakness and helplessness of the object of it. To believe that people of the Indian race, for example, are inferior in intellectual capacity and power to those of European descent, is no reason for believing that it is right to defraud and oppress them by depriving them of their lands or other property without a fair equivalent, or being guilty of any wrong or injustice toward them whatever.

THE WEAK ESPECIALLY ENTITLED TO PROTECTION FROM THE STRONG.

Indeed, the contrary of this is true. The weak and the helpless in any community, instead of being rightfully subject to the oppression of the strong, are specially entitled to protection. If the Author of nature, in order to provide for the more efficient and easy performance of some of the subordinate functions of society to which a high state of civilization gives rise, or for the occupation of certain portions of the earth not adapted to a high state of civilization, or which are from any cause temporarily precluded from it, has prepared races of men with faculties and sentiments which adapt them to this work or to those situations—faculties and sentiments which fit them to be the employed

rather than the employers, to labor rather than to plan, to endure fatigue rather than assume and bear responsibility—surely all generous minds among the higher races will see in that relation a reason, not for taking advantage of their power to do injustice to those thus placed at their mercy, but rather to use it for their protection. They will feel bound, when engaging in any common operation, as, for example, in employing them to hunt and trap for furs among the lakes and forests of the north country, to take care that while they themselves plan and superintend, and their less capable auxiliaries labor and toil to execute, the avails of the common industry shall be so divided as to give to their subordinates the fair and proper share, whatever that may be, for the part which they perform. In this way, though themselves in no respect equal to the higher races, they may enjoy equal rights with them, namely, the same protection and the same enjoyment of the fair and proper reward, comparatively small though it be, for the performance of the inferior functions which their capacity enables them to fulfill.

There is no need, therefore, of maintaining that the Indian is equal to the Caucasian, in order to prevent our having an excuse for oppressing and abusing him. The more inferior and the more

helpless he is, the greater is his claim on the higher and nobler race for justice and protection.

ORIGINAL PEOPLING OF THE CONTINENT.

On the supposition that the American continent was originally peopled by a branch or branches of the human family migrating from the old world, there have been a great many speculations in respect to the time and the manner of their first introduction.

In the first place, they may have come from the northern part of Europe, by the way of Norway and Iceland, to Greenland, and thence down through Labrador to the lake country, and thus have spread through the whole interior of the continent.

The supposition that they may have come in this way, or at least that some may have so come, is confirmed by the fact that there is a great resemblance between some of the Indian tribes and the Scandinavian nations, so called, who inhabit the northern parts of Europe and Asia.

CROSSING THE NORTHERN SEAS.

In respect to the manner in which these supposed emigrants crossed the seas in coming from the north of Europe on one side, or the north of

Asia on the other—for the water which separates the new continent from the old is still narrower on the western side than it is on the eastern—several suppositions may be made. They may have been blown off from their own shores by accident. The people in all those regions live a great deal upon the sea. They make boats of a very substantial character, and evince a great deal of skill and courage in navigating them. In fact, they are compelled to acquire great skill and to exercise great courage in these pursuits, for they obtain almost all their living on the ice-floes, or upon the water between them, and thus they are in constant danger of being caught in the ice and carried away. These ice-floes are kept by the winds and currents in a state of constant motion, and are carried by them hundreds of miles over the sea, and a party caught upon one of them might, perhaps, by making a hut of their boat and killing seals and white bears and other animals that frequent them for food, succeed in making quite a long voyage on such an embarkation in safety.

TRAVELING UPON THE ICE.

Then, again, a whole tribe or congeries of families might undertake to migrate purposely over the ice, to escape from enemies or from famine. They

might travel very far on such expeditions, over ice either fixed or moving, with sledges drawn by dogs or reindeer. The Laplanders and the Esquimaux, it is found at the present day, make very long journeys in this way.

THE PACIFIC ISLANDERS.

Scattered over almost all parts of the Pacific Ocean are groups of islands which are inhabited by races of men that are almost as much at home on the sea as upon the shore. A boat for the water is sometimes an object of even greater necessity to them than a hut for the land; and the magnitude of some of the boats which the islanders that are most advanced in these arts are able to construct and navigate is truly wonderful.

Indeed, these islanders, like the inhabitants of the Arctic regions, have every possible inducement to become seamen, and they enjoy every facility for learning and practicing the nautical art. In the first place, there is no possible communication between the different islands of the same group except by water. Then, moreover, between the different parts of the same island the passage is made much more easily by sea than by land, for the water near the shore is almost always smooth, being protected by coral reefs coming up to the

ARTIC EMIGRATION.

surface at a short distance from the land, while the way through the interior is obstructed by almost impassible thickets, or is made rough and impracticable by volcanic rocks, which the savages have no means of leveling or removing.

It results from this state of things that these islanders all acquire a great degree of skill in navigating the seas around them. The children take to the water at the earliest age. They find it always warm, and, as they wear no clothing, it is difficult to say which they love best—playing in the surf upon the water, or in the sun upon the shore.

The children begin their attempts at navigation by means of any floating substance that they can lay their hands upon, almost as soon as they can walk. Shipmasters, who touch at these islands to get fresh provisions for their crews, say that they have known children not more than three years old to swim out to the ship anchored in the offing, having only a cocoa nut, with the husk left on, to buoy themselves up with in the water.

In some of the islands the natives build canoes of great size and of very complicated construction, and capable, some of them, of conveying a considerable supply of provisions. With these they undertake quite extended expeditions, either of war,

of commerce, or of migration. Such boats as these must often be driven away from their course, and carried by winds and currents to distant lands. It is undoubtedly in this way that the innumerable islands of the Pacific Ocean have become stocked, and it is not at all improbable that similar migrations may have taken place in former ages to the American shores.

CURRENTS OF THE OCEAN.

This supposition is rendered still more probable from the fact that it is now ascertained that the ocean is subject to the flow of certain great permanent currents, which have the velocity and the force and the steady continuance of the currents of rivers, only on a much grander scale than any rivers in the world. A large canoe driven out of its course, and containing a good supply of provisions, might be carried a very long distance on one of these ocean streams, even without any assistance from the wind.

ANTIQUITY OF THE ABORIGINAL POPULATION OF AMERICA.

The remoteness of the period in which the progenitors of the Indian tribes came to America is shown by the number of distinct Indian languages which have been formed, and by the great dissimi-

larity which exists between these languages and any now known in other parts of the world.

A language once formed, even though unwritten, is extremely permanent. It is subject to slight modifications and changes, it is true, such as those by which different dialects are formed in different provinces of the same country; but to make a radical change in the form and structure of a language requires a very long course of time. Now, the languages of America are essentially different, not only in the words but in the whole system on which they are founded, from any languages of the old world, and they are also divided into several distinct classes, which are almost totally different from each other.

This shows that the process of bringing the American languages to their present state has been going on for a very long time and, consequently, that the separation of the races speaking them from the original stock in the old world must have taken place at a very remote period.

ANCIENT NATIONS OF NORTH AMERICA.

At the time when America was discovered nations were found in the central and southern part of the continent that had attained to quite a high degree of civilization, and many ruins of ancient

temples and cities are now from time to time discovered in those countries overgrown with enormous trees, the roots of which are intertwined with the remains of other enormous trees, which show that the structures that they cover must have been in ruins for a great many centuries.

There are no such ruins of ancient cities in the territory now belonging to the United States, but there are remains of ancient fortifications and mounds, of an extremely curious character, scattered through very extensive regions of the western country, which indicate the existence there in former times of a higher civilization and different modes of life from those manifested by the present race of Indians.

DURABILITY OF EARTHWORKS.

It is a very singular fact that works formed of earth and grassed over are among the most permanent and lasting of all the constructions made by man. The grassy mounds in the country of Nineveh and Babylon have remained without the least apparent change for many centuries. There are also in England old druidical mounds, and rings in the grass called fairy rings, which have been known and described in books from the earliest periods of English history, and they re-

main now, from century to century, apparently without any change, while hundreds of massive buildings of stone have gone entirely to decay, and the ruins of those that still remain are found to change rapidly, if neglected, from year to year. In the first settled portions of the United States, too, it is not improbable that the oldest structures of which any traces now remain are the beaver dams.

In fact, any artificial conformation of the surface of the ground, once well covered with greensward, and left undisturbed by the plough, seems to be more enduring than any other work of man.

The remains of ancient fortifications in the upper part of the valley of the Mississippi are very numerous, and they are on a very extended scale. They are laid out regularly, and denote the existence of considerable towns, or of places of encampments for large bodies of men. In some of them spaces of fifty and a hundred acres are inclosed.

ANCIENT FIELDS.

There are also in certain parts of the prairies marks of ancient corn fields, of very great size, and extending over the country for a hundred and fifty miles. The land in these fields lies in ridges, like those always seen in a corn field that is left,

after the corn is harvested, to grass itself over, without being leveled by the plough and harrow. These ridges are so regular, and they are confined so strictly to circumscribed and well defined fields —fields, too, occupying situations exactly suitable for the cultivation of corn—as to leave no room for doubt in respect to the nature of them.

They are very ancient too, as is proved by the trees often found standing upon them. Some persons, in examining these fields, once caused an oak tree to be cut down which was growing in one of them, and on counting the layers of wood they found that the tree was three hundred and twenty-five years old. This carries the time when the fields were cultivated far beyond the settlement of the country by Europeans; and inasmuch as no Indian tribes have been known, since the coming of Europeans, to cultivate the ground so extensively, it is supposed that these fields denote that in ancient times there existed a more numerous and civilized population over all this region than exists at the present day.

THE COPPER MINES.

This opinion is confirmed by certain indications that are observed in the Lake Superior copper region. Ancient mines are found here with traces

of former workings that are on a scale far beyond the capacity of the Indians of the present day.

Copper is a metal that comes into use in the history of civilization much earlier than iron, for copper is often found in a metallic and malleable condition, in its native state, while iron, being so easily oxidizable, almost always exists in the form of an ore, which it is necessary to reduce by a highly artificial process before the iron can be obtained. To make implements of copper it is only necessary to find masses of native metal of the proper size, such as are often found upon or near the surface of the ground, and then to bring them to the required shape by hammering them with smooth and hard stones, or by grinding them upon rough ones.

Accordingly, as might naturally be expected, copper implements and ornaments have been, from time immemorial, very much in use among all the Indian tribes. But at the period of the discovery of America, and since that time, the supply of copper for these purposes was obtained almost entirely from specimens found near the surface of the ground. There is no evidence of any systematic or extended workings of the mines within a period of several centuries; but there is abundant evidence that before that time, as is shown by the age

of the trees growing over the old excavations, mining operations in this region were carried on upon a very considerable scale. The miners of the present day frequently come to old trenches, half filled in and grassed over, and with immense trees growing in them, at the bottom of which, when they dig them out anew, they find remains of the ancient works. They come down, when digging in such places, to great masses of copper blocked up on skids of wood which have been preserved from decay by lying all the time in water, with marks of fire upon them, and broken tools lying all around.

The tools which these old miners used were very curious. The principal one was a sort of hammer made of a smooth and hard stone. The handle of these hammers, instead of passing through the stone, was formed of a withe, and was carried round it in a small groove, which they contrived in some way to pick in the stone. The withe was brought round the stone in this groove while it was green, and the two ends were then twisted together and secured by a cord wound round tight, close to the stone. Then when the withe became dry it formed a very stiff and substantial handle, and the groove prevented it from slipping off the stone.

Trees have been found growing over ancient works in these mines with five hundred concentric layers of wood in them, proving that the excavations and the works carried on in them were finally abandoned at least five hundred years ago.

THE MOUNDS OF FLORIDA.

Mounds of a somewhat similar character to those existing in the western country are found in Florida, many of which contain human bones in considerable quantities, indicating that they were used as places of sepulture. In one the bones of a very large person were found placed in a horizontal position in the center, and around it, in a circle, the skeletons of a number of other persons—these last being in a sitting position.

In another mound there were two layers of skeletons, one above the other. In both layers the bodies were arranged in a circle, with the heads toward the center and the feet toward the circumference of the mound.

In most of these mounds fragments of pottery were found. These relics consist of pieces of broken jars, kettles, stew-pans, porringers, and other domestic utensils of that sort. In many cases the vessels were whole, with the exception of a small hole in the bottom of each, which appeared

to have been purposely made. This may have been done to render the utensils useless, in order that there might be no inducement to tempt any persons to violate the graves with the intent of robbing them of articles buried with the deceased owners.

Some of these specimens gave indications of considerable art in the manufacture of them, being ornamented with various devices worked in the clay. One had a hollow handle, which was so fashioned, in connection with the cavity of the vessel itself, as to indicate that it was meant to be used as a sort of funnel to pour out the liquid into smaller vessels without spilling it.

Whether these articles had been baked in the fire or sun-dried it was found difficult to ascertain; as also it was to determine whether they were fashioned by the hand or upon a potter's wheel. The making of vessels out of clay by the hand is one of the very first steps taken by all savages in their attempts at art. Learning to indurate them, by baking them in the fire, is the second step; and making a wheel to fashion them upon, by putting the mass of clay in revolution in order to facilitate giving it a true circular form, is a third step, and one much in advance of the other two.

The remains of a potter's wheel, with a mass of

clay upon it partly fashioned into a vessel, was found some years since in a mound in Georgia, and this at first seemed to afford positive proof that the Indians understood the art of shaping their pottery by means of a revolution of the clay. It was, however, afterward thought not impossible that this wheel might have been introduced by the Spaniards, who very early made incursions into that part of the country and attempted to found settlements there. Indeed, the Spaniards were so early in their visits to the shores of the Gulf of Mexico, and the French to those of the great lakes, that considerable care is necessary to avoid attributing to the aboriginal Indians relics and indications which were really left by their European visitors.

UNQUESTIONABLE ANTIQUITY OF MANY OF THE MOUNDS.

Although many of the mounds now found may be of comparatively modern date, there are some which, like those on the Ohio and the other western rivers, bear incontestable evidence of great antiquity in the immense trees that are found growing upon them. There are live-oaks standing upon some of these tumuli of such size that they are estimated to be six or seven hundred years old. This would carry back the date of the mound to a

period two or three centuries anterior to the time of Columbus.

In many instances, on the other hand, the mounds are situated in open plains, or are covered with thickets consisting of plants and trees of moderate age. In such cases as these it is difficult to determine the question of the antiquity of the mound, except so far as a reasonable judgment may be formed from the character and appearance of the objects found within it.

CONCLUSION.

On the whole, there is abundant evidence in these ancient remains that this continent has been inhabited by the ancestors of the present Indian races for a very long period. It is, moreover, generally supposed that in former times the population was far more numerous, and that the nations composing it were far more advanced in civilization than those found in possession of the country when the Europeans first visited these shores.

CHAPTER VI.

THE INDIAN FAMILY

THE INSTITUTION OF MARRIAGE.

THE Indians, as all other communities of human beings in every age, in every clime, and in every possible condition in respect to civilization or barbarism, have done, lived in *families*—the husband, the wife, and the children forming a natural group and dwelling together in common, the children remaining under the care of the parents until old enough to take care of themselves; and the husband and wife, once joined, remaining united for life.

Some persons have imagined that the institution of marriage is an artificial institution, adopted by society as an arrangement proved by experiment to be, on the whole, most advantageous to man. But the universality of this institution proves that it is of higher origin. It is a part of man's nature, considered as an animal, that he should have one female partner, and that the union which binds him to this partner, when once she is chosen, should endure for life.

It is curious to observe that the provision of nature by which man is led everywhere, and under all circumstances, to the institution of marriage as the foundation of the social state, is in accordance with a general principle which pervades the whole animal creation. The principal is this:

GENERAL LAW OF PAIRING.

In all cases where the nurture of the young of any animal, for any reason, requires more than the mother herself alone can do for them, it seems to be a general law of nature in respect to such animals that they are provided with instincts which lead them to pair. A male and female unite, and they remain united until the young no longer need their joint assistance.

Thus birds pair, because it is necessary that both should co-operate to build the nest, and also that the father should bring food while the mother sits upon the eggs to hatch them. And lions pair, for one must remain and take care of the young, while the other goes away on distant excursions to procure food.

But sheep and other such animals do not pair, for their young do not require the joint attention of father and mother.

In respect to the duration of the union thus

formed, the principle is that it continues as long as the necessity for it continues; that is, as long as the brood of young ones require the united efforts of both father and mother to protect them. Then —at least so it is supposed in the case of birds— when the season is over and the young ones are grown up to maturity, the union is terminated, the pair separate, and each, at the commencement of a new season, chooses a mate again.

APPLICATION TO THE CASE OF MAN.

Now, in the case of man, the young require the aid of both parents for their nurture and protection; and inasmuch as each requires this attention for ten or twelve years at least, and as during the the time while the first-born is attaining this age others succeed, the period during which the conjoint efforts of the parents are required is protracted, without intermission, during the whole of their lives—that is, through all the portion of it during which their natural vigor continues unimpaired. It follows from this, and from the fact that the numbers of the sexes are equal, that according to the analogy of nature we should have expected that the human species would be provided with instincts leading them to unite in pairs, and to continue so united for life.

We find, accordingly, that this is the fact everywhere. The marriage laws of all human societies are consequently made to guard and protect the marriage institution—not to establish it. The institution itself is founded in instincts and principles of our nature existing antecedent to all law.

Indeed, the family institution, instead of waiting to be established by law, is often even more important and more prominent in low states of civilization than in high. It is most powerful where laws are weakest. Instead of being created by law and thus following it in the order of time, it is itself rather the origin and source of law. So far as we have any opportunity to trace back the forms of social organization to their source, we find them arising usually, in the first instance, from that primordial and elementary bond, the union of husband with wife, which springs at once from the physical constitution and innate instincts of man, and is the germ from which all other systems of authority and subordination come.

It was eminently so among the Indians. They lived in families throughout the length and breadth of the land—the families of the same connection being grouped together in tribes. They lived generally in peace, and were engaged in labors of

patient industry for providing food and clothing for themselves and their children.

CONSTRUCTION OF DWELLINGS.

The dwellings of the Indians were generally made of poles covered with bark or mats. The ends of the poles were set in the ground in a ring of holes made to receive them, and then the tops were tied together in a point above, so as to give the hut a conical form. Sometimes, however, the ring was made larger, and then the ends of the poles were lapped upon each other, each opposite pair being joined in this way. By this mode of fashioning the frame the hut would receive a hemispherical form—that is, the form of a dome—a structure much less convenient than the other.

In other cases the poles would be set in two long rows of holes, made at a suitable distance from each other, and each opposite pair would then be lapped together and tied. Poles were then laid lengthwise along the roof thus formed and tied at the crossings. These lengthwise poles acted as stays to give strength and stiffness to the frame. When the frame was thus completed it was covered with mats or bark. Of course, a hut made in this way would be of a semi-cylindrical form, like a long arbor built over a walk in a garden. Some

lodges made in this way were intended to accommodate many families, and were very large.

COVERINGS.

The bark used for the covering of the huts and lodges was commonly birch bark, a kind which peels off the tree in large thin sheets, and is of a substance, too, which is completely impervious to water. These sheets of bark could be rolled up in a very compact form, as matting or carpeting is rolled with us.

These strips peel off in a direction *round* the tree, and of course cannot be longer than the circumference of the tree from which they are taken. But a tree of two feet and a half in diameter, not an unusual size in the native forests of the country, would yield strips seven and eight feet long, which would be amply sufficient for the purpose intended, They were usually taken off the tree in pieces from two to three feet wide.

In putting on these sheets the upper end was fastened to the upper part of the frame—leaving a space open for chimney—and the lower end came down to the ground. A round stick was rolled a little way into this lower end and sewed in. This stick helped to strengthen the end, and also assisted in holding it in its place. A stone was

laid upon it when necessary, to keep it down. It also served as a roller to roll the sheet upon when the family removed; for these sheets of bark, once prepared, were considered quite valuable, and they were always taken away in cases of removal, though the poles which formed the frame were often left behind.

In some cases tribes living in the western country, on the banks of the Upper Missouri, where perhaps birch bark could not be obtained, covered the frames of their wigwams with flat stones set up against the poles, in such a way that they leaned in some measure upon them. These stones were arranged around the frame, tier above tier, each tier resting upon the edges of the tier below, and leaning against the frame. The joints were plastered with a mortar made of clay.

Of course, for such a covering as this it was necessary to make the frame very much stronger than when a lighter one was to be used.

INTERIOR OF THE LODGES.

The large lodges often contained several families, each of whom occupied its own particular portion of the interior. In such cases the different tenants were very careful not to encroach upon each other's domains. There was a fire in the middle

of the lodge, and mats and skins for the members of the different families were laid down upon the ground in different situations around it. The sleeping places were back under the roof, the beds being also made of mats and skins.

When there were babies, beds were made for them of the finest moss, with a skin spread over it that was covered with some soft fur.

It was the pride of the mistress of this strange household to keep everything in good order in her domain. She maintained a bright and cheerful fire in the fire-place when the weather was cold, and kept the ground nicely swept and clean all around it. Then when all was arranged she would take her place upon her own mat or skin, and employ herself in sewing a roller into a new sheet of bark, or in making mats, or mocassins, or snow-shoes, while her husband, in his place near by, was employed in fashioning spears or arrows, or in making other hunting or fishing gear, and the children sat musing silently by the fire, or tumbled over each other in their play, upon a bear-skin in the corner.

INDIAN HOUSEKEEPING.

Among the Indians the whole charge of the housekeeping devolved upon the women, as with

us, but in their understanding of this term much more was included than in ours. It comprised *building* the house as well as taking care of it, and also the making of all the furniture. It was the work of the women to cut the poles and set them in the ground, to have always on hand a good supply of bark to cover the frame, and to take the work apart and put it together again, in case of removal. They had also to cultivate the corn fields, store the grain when it was collected, and prepare the food.

It was the business of the man to hunt and fish alone in time of peace, and to fight for the protection of his territory, and of his wife and children, in case of war.

REMOVALS.

Although each tribe continued in most cases to occupy the same territory from generation to generation, still removals from place to place within the territory were very common. The best places for cultivating corn, and for fishing in the summer season, were not usually the best for hunting and trapping the wild animals of the woods in the winter. Accordingly there were frequent occasions to remove a family or a settlement from place to place; and in order to facilitate these migrations

the wigwams were almost always built on the borders of streams, so that the sheets of bark for roofs, the mats, the skins, the cooking utensils, and the other household goods, might be conveyed to the new locality by water in canoes.

CANOES.

These canoes themselves were made of birch bark. There was first a frame made of strips of wood of about the size and thickness of a common kitchen-basket handle, and then the whole was covered with sheets of bark, very neatly and strongly sewed. The thread for such sewing was made of the fibers of certain kinds of bark twisted into filaments by rubbing them with a rolling motion on the knee, or of thongs cut from the hides of animals. It was wonderful to see with what skill the Indian women would execute this sewing, so as to make a firm, compact and substantial seam, and without leaving any perceptible openings at the stitches. The boat would be almost water-tight when it was first put together, and it was soon made perfectly so by paying over the seams with pitch obtained from some species of the pine, or other resin-bearing tree.

The upper edge of the boat all around was strengthened by double strips of wood inclosing

the edges of the sheets of bark, the whole being bound together by sewing of a specially substantial character. This formed the gunwale of the boat. It was in some respects like the upper edge of a strong basket, which is usually reinforced in a similar way. The boat itself was in reality an open-work basket, sheathed on the outside with sheets of birch bark.

Canoes thus made, though light and buoyant, were quite frail. It was necessary to step very lightly in getting into one of them, for fear of breaking through the bottom, and to sit very still when in, for fear of rolling it over, for the bottom was perfectly round and smooth.

LOG CANOES.

In some parts of the country, where birch bark could not be procured for sheathing, it was customary to make boats of logs.

It would at first seem difficult to imagine how a party of savages, without any cutting tools, could take down a large tree, hollow it out, and fashion it into a canoe. They accomplished the work by the agency of fire. In the first place, after selecting a suitable tree for the purpose, they would build a fire around its roots, and by constantly bringing more wood they would keep the fire up

for many days, until at last the tree was burned so nearly off that by pushing all together against it on one side, by means of poles, or pulling with a cord, they would cause it to lean a little out of the perpendicular, and then its own weight would bring it with a great crash to the ground.

This was the first stage of the process. The next was to burn off the stem of the tree at the right length for the proposed canoe. In burning it off thus the workmen took care to manage the fire in such a way as to give to the end the proper shape, and at the same time that this process was going on the fire was continued at the other end, in order to burn off the splinters and superfluous wood, and to give that end, too, the proper form for the bow or stern of the canoe, which ever it was to be. To do this well of course required considerable experience and skill on the part of the workmen.

At the same time fires were built along the whole length of the log upon the top, in order to burn off the convex portion, and then small fires were continued along the center line until the whole interior of the log was burned out. It was easy, by means of water, to confine the fire within precise limits, so as at last to have a well-shaped canoe, with sides and bottom far thinner and lighter, and with a general form much more

graceful and convenient than it would be supposed possible to produce in such a way.

When the burning was completed the whole surface of the boat, inside and out, was scraped smooth by means of tools made of flint, and of other hard stones of that kind which could be broken so as to furnish a sharp edge. The scraping of the surface of the wood with tools of this sort was, of course, a very slow and laborious process, but when completed the result was to produce a very smooth and regular finish. The boat was then painted. The pigments for this purpose were obtained from various substances found in the ground, such as ochres and other similar earths, and they were mixed with oils obtained from animals.

The final result was, in many cases, a canoe of very large size and of quite an elegant appearance.

Of course, a canoe like this is only produced after considerable progress has been made by a tribe in the mechanical arts. At first, it is said, the Indians used the trunks of trees which they found already hollowed by decay, in places where they grew. To prevent the water coming in at the ends in such a case, they used to stop them with masses of clay, which they kneaded in at the bow and stern.

CLEARING LAND.

The Indians had many clearings when the Europeans first came into the country. These clearings were made for the purpose of raising corn, and they were considered of great value—each one remaining in the same family or tribe from generation to generation, for ages. It was very difficult to make these clearings, since the only way of felling trees was by fire. Then besides, when the tree was down the work of getting out the roots was one of great labor. Thus absolutely new clearings were seldom made. The old ones remained, and each generation enlarged them a little when any increase of population required an enlargement, by burning down trees along the margin of them. The method was to dig about the tree so as to expose the roots as much as possible, and then to build a fire around it so as to burn it off. But this was a very slow and toilsome work, for if it was a living tree the wood was green, and after the outside had burned away it was difficult to get the fire *in*, so as to make it take effect up the heart of the stem. To promote the burning as much as possible they used to pick off the charred portion as fast as the fire formed it, with sharp stones fastened to the ends of poles.

In this way, and by constantly bringing fresh supplies of fuel, the tree was at length made to fall.

CLEARING LAND.

Then to take off the branches and to divide the stem into lengths small enough to enable them to drag them away—all by the action of fire alone—required great additional toil. It is not surprising, under these circumstances, that the work of clearing land proceeded slowly.

TILLING THE LAND.

The work of tilling the land after it was cleared belonged wholly to the women. The men reserved their strength for the immensely more difficult and dangerous duty of hunting and fishing, and of defending the country in case of war.

In planting their fields the women used clam-shells for hoes, and sticks sharpened in the fire for picks and shovels. When the crop was ripe the corn was gathered, and it was stored for winter in holes made in the ground for the purpose. The bottom and sides of the holes were protected by a lining of bark, or of wooden poles set up close together all around them. When the hole was filled it was covered over, and not opened again until the corn was required for use.

PREPARING THE CORN FOR FOOD.

Instead of mills to grind the corn the Indian women used mortars to pound it. These mortars were stones with hollows in them. For the pestle another stone with a smooth and round surface at the bottom was used. At first such stones were employed for these purposes as were found of nearly the proper form in their natural state; but in process of time the people acquired the art of

fashioning them so as to make mortars of very good shape, and of considerable capacity. Many such mortars, with pestles belonging to them, have been dug up in ancient mounds, or found buried just beneath the surface around old and abandoned encampments in the western country.

The women sometimes made cakes of their corn and baked them in the ashes, but, more commonly, they made a sort of porridge of it, or rather soup, for they usually put in a part of some animal, which the husband had brought home from the chase, to enrich and flavor it. The pounded corn and the piece of meat were boiled in the same vessel until they were sufficiently cooked, and then the whole was eaten together.

MODE OF BOILING.

The mode of boiling this mess was singular enough. They had no vessels which would bear to be exposed directly to the action of fire. They could fashion copper into some very ingenious forms by beating it with smooth stones and grinding it upon rough ones, but they could not make anything like a vessel of it. Nor could they make any pottery that would hold water and stand the fire. But, strange as it may seem, they could fashion a vessel of osiers, coiling them round and

round in a spiral manner, and sewing each coil to the one below it, in such a manner as to make the work water-tight or nearly so. Any small amount of leakage was probably not of much consequence.

The way in which they boiled their soup in these vessels—it is obvious that it would not answer to put one over the fire—was very curious. It was by setting the vessel on the ground by the side of the fire and putting red-hot stones into it. A single red-hot stone would keep the contents boiling longer than one would suppose, and when one became cool another was put in to take its place. Of course, a great deal of soot and ashes went in with the stone, and white men who, in traveling among the Indians, have been invited to partake of a meal so prepared, have not represented the soup as exhibiting a very attractive appearance when it was ready to be served.

VARIED OCCUPATIONS OF THE WOMEN.

From what has been said it will be seen that all the duties of every kind relating to the home of the family and its surroundings devolved upon the woman—it being her province to relieve her husband of every care except that of hunting, of fishing, and of war. When he brought home the animal that he had killed it was her province to take

care both of the skin and of the flesh. The skin she stretched upon a frame and scraped the flesh-ward side of it with a sharp stone, so as thoroughly to cleanse it, and then made various applications to it and subjected it to a particular course of treatment, which took with them the place of tanning. The effect was to make it soft and pliant and to preserve it from future decay.

The flesh, in summer, they preserved by smoking it. They would dig a hole in the ground and make a fire in it. The fire, being at the bottom of the hole, would, of course, not burn freely, but would only smoulder away and make a great deal of smoke. Over and around this hole they would hang the pieces of meat, and then build a sort of inclosure, with mats, around them, in order to confine the smoke. The mats formed, in fact, a species of funnel through which all the smoke must pass as it ascended into the air.

The holes for these fires they dug with their sharpened sticks and clam-shell hoes.

MOCCASINS.

It was the duty of the women to make clothing from the skins after they were cured. The clothing consisted of moccasins for the feet, tight leggins for the legs, and a sort of a double apron,

with one flap behind and another before, which was worn both by the women and the men. There was also a looser garment for the shoulders when the weather required it.

All these garments were made with great care, and often a vast deal of labor was bestowed upon them. They were adorned with fringes made of hair dyed of various colors, and with feathers of eagles and of other great birds, and porcupine quills, and with embroidery worked in different colored threads.

The moccasins were made of one piece of skin, the center of the piece forming the sole, and the sides being drawn up and gathered over the foot above. Some of them were finished in a very ornamental manner. The fashion of them was very different according to the purpose for which they were intended. Those made for men, which were, of course, destined to endure the wear and tear of long tramps through the woods on hunting expeditions or military campaigns, were made of very stout leather, and sometimes two or three additional thicknesses were put upon the soles.

Those of the women, which were, of course, to be subjected to much gentler usage, were made lighter and of less substantial material; and there was a kind intended to be worn by young women

on the occasion of their marriage, for which a skin was prepared by a long and careful process that made it almost as soft as kid. These bridal moccasins were cut in a peculiar fashion, and they were embroidered with hair of different colors, and gaudily ornamented in other ways.

EXCURSIONS OF THE WOMEN.

As everything connected with the management of the household devolved upon the woman, it became her duty from time to time to make excursions along the streams or in the woods to procure birch bark to make new rolls, or bullrushes for mats or other such things. Accordingly, sometimes, when the man had gone away before sunrise, or perhaps even before the dawn, on some distant hunting or fishing excursion, the woman, after breakfast, would prepare for an expedition of her own. In some cases she would take the children, and at others she would leave them at home under the care of an older brother or sister. The number of children was, however, seldom large enough to make this last arrangement desirable, as the Indian families were almost always small. It has been ascertained that the average number of children was only two.

The mother then would usually take her little

ones with her and would embark in her canoe. The baby, if there was one, would be tied to a board and lashed to her back; or by means of being thus secured to a board it could be laid down in the bottom of the boat, or placed in an inclined position against one of the thwarts. It seldom or never cried. There were two reasons for this extraordinary quietness—first, the extremely imperturbable and unexcitable character of the Indian temperament, and in the second place, the fact that the poor child found by experience that he never gained anything by crying.

Having taken her place in her boat the Indian woman would paddle her way up or down the stream, or along the shores of a pond, into retired coves or inlets where the rushes grew, and would gather the supply that she required; and then toward evening would paddle home again, so as to be ready to receive her husband on his return.

Sometimes the object of these excursions was to collect and bring home fuel for the fire. In these cases, in order to prevent the sticks of wood from injuring the canoe, she would first lay poles along the bottom of it to protect the framework and the bark covering. For cutting these poles the Indians had stone hatchets, with handles formed of withes bound round the head, like the handles of

the hammers already described. Small saplings could be cut off pretty easily with these tools, by first bending them over in such a way as to bring the fibres of the wood near the ground into a state of high tension, when an inconsiderable blow, even with a dull instrument, would cause the stem to snap off at once.

The fuel itself consisted of such dried fragments of wood as could be found already lying in pieces of a convenient size to be removed, or else so far decayed that they could be easily broken into such pieces.

EDUCATION OF THE CHILDREN.

The children of these families received no education at all until they came to be old enough to learn to set little traps in the woods for small game, or if girls, to begin to help their mothers to make mats or leggins or mocassins. Sometimes they were stationed in the corn-field while the corn was coming up, in order to drive away the crows and other such plunderers with sticks and stones. The boys would usually take to the woods as soon as they were old enough to find their way among the trees. Their fathers would make bows and arrows for them adapted to their strength, and show them how to set traps for squirrels, rabbits,

foxes, and other similar game, and great was their exultation and joy when they found anything taken in them.

There is an account of a small boy who set a trap in the woods, and his uncle, who was visiting at the wigwam where the boy lived, went out secretly and put a rabbit in it which he had caught himself in another place. So when the boy went to his trap he found to his great pride and joy that there was a rabbit there. It was the first that he had ever caught. He brought it home in triumph and gave it to his mother, and she made a soup of it, and the family, with their guest, ate the soup together, leaving the boy to think all the time that it was really the fruit of his hunting that furnished the meal.

STORIES FOR CHILDREN.

The mothers were accustomed to talk very little with their children. Indeed, the Indians were extremely taciturn on all occasions. They, however, sometimes explained to the children the principles of duty, and told them stories to illustrate and enforce what they taught. Some of these stories are to be found reduced to writing, among other legends and tales which travelers who have visited Indians in their wigwams, or have lived

among them, have recorded. The scenes of these stories were laid, of course, always in the woods, and wild animals figured very conspicuously in them. Here is one which will serve as a specimen. It was intended, we must suppose, to teach older children to be faithful, kind and true to the younger ones.

THE CHILD THAT TURNED INTO A WOLF.

Once there was a man who lived with his wife in a lonely place on the borders of a lake. They had two children nearly grown up. The oldest was a boy. The other was a girl. Besides these there was a third child, a boy, who was very young.

The mother was more anxious about this little child than about either of the others, for as she and her husband were considerably advanced in life, she was afraid that they might not live long enough to take care of him until he should grow up and be able to take care of himself.

At last, one day when the father was hunting in the forests he was killed by wild beasts. The mother, with the help of her oldest boy, continued to maintain the family for some time, but at length she fell sick and could do no more. When she found that she was about to die she called her two

oldest children to her and charged them to be kind to their little brother after she was gone, and never forsake him. They promised that they would obey. Soon after this the woman died.

For a time the oldest boy remained at home and took care of his sister and brother. But at last he grew tired of hunting and fishing every day to procure food for them, and so he went away and left them.

The girl remained at home for some time after the boy had gone away, but at last she grew tired of taking care of her little brother, and so she went away too.

The child was now left all alone in the wigwam. He staid there a day or two without anything to eat, wondering all the time where his brother and sister had gone. At last, being almost starved, he thought he would go into the woods and see if he could not find what had become of them.

He wandered about all day, and at length toward evening he became so weak that he could go no further, and he sank down upon the ground ready to die. But suddenly he observed near him a she wolf feeding her young ones with the flesh of a rabbit, or some other such animal which she had caught. The little boy crept toward her, and the wolf, seeing how pale and exhausted he looked,

gave him some of the meat. This food revived and strengthened him so that he became quite like himself again, and he began to play with the little wolves, and tumble about with them upon the ground.

After this the old wolf, every day when she came home with food for her young ones, gave the boy some of it too, and he continued living with this wild family for some time in peace and plenty.

At length, one day while he was playing with the young wolves upon the shore of the lake, and singing a song, his brother, who was fishing on the lake in his canoe, at some distance from the shore, heard his voice, and he at once recognized it as that of his little brother. His conscience had often reproached him for having forsaken the child, and he was now overjoyed to find that he was still alive. He paddled his canoe toward the shore, and began to call his brother by name.

But from living so long with the wolves, and partaking the same sustenance with them, the child's nature had been gradually undergoing a change, and he was growing like a wild animal. In a word, he was turning into a wolf himself; so when he saw his brother approach, and heard his voice, instead of coming down to the shore to

meet him, he gave a wild cry and ran off into the woods with the young wolves that he was with. As he went he sang a song, the burden of which was:

"I am changing into a wolf, and I cannot come;
I am changing into a wolf, and I cannot come."

His brother went away, feeling very sorrowful and sad. He found his sister and told her what he had seen, and during all the rest of their lives they were both rendered very unhappy by the remorse and anguish which they suffered at the thought of having abandoned their little brother in his helplessness, and of having thus been the cause of his turning into a wolf.

CHAPTER VII.

MECHANIC ARTS.

NATIVE INGENUITY.

It is surprising how much ingenuity the Indians displayed in contriving ways for accomplishing their various purposes, without any of the means or facilities which we should have considered essential. They had no iron, and could, of course, have no good cutting tools. All the tools and implements of every kind which were used by the Indians of the eastern part of the country were formed of stone, or wood, or bone, or something of that sort, and although working with such tools was an exceedingly slow and tedious process, still the results that they finally attained were, in some cases, truly wonderful.

Some tribes, especially those that lived in the neighborhood of the great lakes, made certain tools and implements of copper, which metal, it is said, they had some means of hardening, so that it would cut wood tolerably well. But they had no iron.

Accordingly, when the Europeans first came to this country, one of the things that principally struck the Indians was their possession of knives. It is said that the name by which the foreigners were designated among some of the tribes was *knife men.* Columbus found, too, when he first landed in the West India Islands, that the natives would barter almost anything in their possession for a needle.

MANUFACTURE OF WEAPONS.

The work upon which most of the skill and ingenuity of the Indians was displayed was the manufacture of instruments to be used in hunting and in war. The bow and arrow was the principal weapon, although they likewise used spears and clubs of various kinds. Their spears and arrows they tipped with heads formed of a stone nearly as hard as flint, which they could shape very exactly by splitting off portions of the mass in a peculiar way, by a process similar to that in which gun-flints are fashioned at the present time. These heads were fastened to the shafts of the spear or of the arrow by means of very slender thongs of hide put on green. These, in shrinking as they dried, would bind the stone to the wood in the firmest manner imaginable.

Great numbers of these arrow-heads and spear-heads have been found in mounds and in old Indian encampments, and are now preserved in museums in all parts of the country.

These weapons were much more efficient than it would be supposed possible that such rude contrivances could be. Of course, in throwing an arrow from a bow everything depends upon the strength of the arm which discharges it. But it is said that some of the western Indians could shoot an arrow swifter than a bullet could be thrown from a gun, and one of them has been known to pass entirely through the body of a buffalo—at least so it is stated on what seems to be very good authority. When De Soto landed in Florida his horse was shot under him, in an attack from the Indians, by an arrow which passed through the covering of the saddle, and entered seven or eight inches into the animal's side.

In one case, too, when a man was killed by one of these arrows, the head of it was found imbedded in the solid part of the bone of his leg, so that it could not be pulled out again.

After all, however, the immense superiority of the European fire-arms became immediately apparent, when the comparison came to be made between the two classes of weapons. Some very amusing ac-

counts are given by the early explorers of the American continent, of the astonishment the Indians sometimes manifested when they first witnessed the effects produced by a discharge of musketry. They were not always pleased to find how immensely superior the weapons of the white man were.

SUPERIORITY OF FIRE-ARMS.

A party of French explorers under the command of a certain officer named Laudonniere, whose adventures will be narrated in full in the third volume of this series, when making an excursion in boats up a certain river in Florida, and landing from time to time to communicate with the Indians, and to trade with them, were received at one time by a chieftain in his village, who in the course of the interview proposed a trial of the muskets of the visitors against the bows and arrows of his warriors. Laudonniere gives an account of the affair in the following language:

"In our discourſing with one another wee entred into ſpeach as touching the exerciſe of armes. Then the chief cauſed a corſelet to be ſet on end and prayed me to make a proofe of our Harguebuzes and their bowes. But this prooſe, when we had made it, pleaſed him very little. For as ſoon as he knew that our Harguebuzes did eaſily pearce that which all the force of their bowes could not hurt he ſeemed to be ſorie, muſing, with himſelfe how this thing might be done."

CURIOUS MODES OF MAKING HANDLES.

One of the nicest operations with us, in the practice of the mechanical arts, is that of putting a handle to a tool in such a manner that it shall be firm and strong, and capable of standing the heavy usage to which many tools are subject. The Indians had several ingenious modes of accomplishing this purpose. Sometimes, as has been stated in another place, they made the handle of a withe, which was wound *around* the tool, in a groove hewn in the stone for the purpose. The withe was put on when green, and by this means it could be closely fitted, and then when dry it became perfectly rigid and firm.

Another mode was to make a cleft in a young and growing stem and carefully insert the tool into it in such a manner that the two parts of the stem should closely embrace the groove of the tool, and then leave the whole until the wood should grow over the stone so as to hold it securely. The stem was then cut off and the shaft of it fashioned into the proper form.

STONE-HEADED MACE.

Some of the tribes had an ingenious way of fastening a round stone to the end of a long handle

for the purpose of forming a mace or war-club. They would draw a piece of green hide over the stone, and bring the edges of it down round the handle, and lash it there by means of a thong of the same material wound round and round it, in a close spiral. The result was that the hide, in drying, would shrink and harden, and bind the stone in the firmest possible manner to the handle. By this means a weapon of a very formidable character was produced.

MILITARY ORNAMENTS.

The Indians displayed a great deal of skill in making ornaments of various kinds with which to decorate their chiefs when going to war. These ornaments were made of the horns of animals, the feathers of birds, porcupine quills, and of long hair dyed of various brilliant colors. They particularly prized the feathers of eagles for these decorations, on account of the fierce and terrible courage of that bird, which they seemed to imagine imparted an expression of martial prowess to his very plumes.

For the same reason the great warriors chose for their clothing the skins of the fiercest and most formidable beasts of prey. A warrior dressed in full in these habiliments—his spear, his head-

dress, his sleeves, and the borders of his garments all adorned with feathers and fringes of hair dyed of the most gaudy colors—presented sometimes a most extraordinary spectacle.

INDIAN CHIEF IN HIS MILITARY DRESS.

It is quite a remarkable fact that, among all Indian tribes, it was the prevailing fashion for the *men* to wear the finery. The women were all accustomed to dress in a very plain and unostentatious manner. It is curious to observe, too, that among all the animals inferior to man it is the male usually that monopolizes the gaudy decorations.

HUNTING AND FISHING.

Great was the ingenuity which the Indians dis-

played in hunting and trapping game and in catching fish, both from the inland waters and from the sea. In hunting they depended mainly on stratagem. Indeed, their weapons were so few and the range attainable by them was so limited, that artifice and wiles became almost necessarily their main resource.

They were very ingenious, too, in contriving traps to set for wild animals. The most common mode of setting a trap was by poising one end of a log of wood, larger or smaller according to the size and strength of the animal to be taken, in such a manner that, on touching a stick to which the bait was attached, the log would fall down and crush the victim beneath it. An Indian would go forth in the morning from his wigwam and take a great circuit through the forest, setting traps of this kind at different places along the way. He would keep his bow in his hand all the time, with an arrow ready at any moment to be adjusted to the string, and would creep along stealthily as he advanced, looking out in every direction, both on the ground and upon the trees, and noticing every indication, however slight, of any animals being near. He looked carefully for tracks, for marks of browsing upon the trees, for branches

bent or broken down, and for every other sign or token which a passing animal might leave.

SOLITARY HABITS OF THE INDIAN.

In his march through the woods on these expeditions the Indian was always alone. Even if, for any reason, two or more persons were going the same way, they did not walk together, making their observations in common, and beguiling the gloom and solitude of the forest by conversation. That would have diverted their attention and interfered with their work. So in such cases they walked at a distance from each other, each making his own observations and keeping his own watch. It is a general law of nature, as has already been remarked, that wild animals seeking prey are silent and solitary in their habits, prowling about stealthily and avoiding their own kind while watching for their victims. In these hunting excursions the Indian himself was little else than a wild animal seeking his prey, and he was endowed by nature with the qualities that pertain to such a condition.

SUMMER HUNTING.

In summer hunting the Indian killed animals for the sake of their flesh, to be used for food, for

in the summer, and especially in the latter part of it, all such animals are fat, and their flesh is in the best possible condition to be eaten. If the hunter took more than he needed at this season for his immediate wants, his wife preserved the surplus by smoking or drying it in the manner already explained.

In these summer excursions the Indian often went in his canoe, following the streams or the shores of a lake or pond, and landing here and there in secluded places, to go in among the thickets and set his traps, or examine those set the day before. Generally he was alone in his canoe. If, however, he had a companion, they both preserved the same silence and caution as when on the land. Each would, in his own part of the canoe, ply his paddle, watching the shores of the stream and the trees which overhung the bank, as the boat went on, and looking earnestly into every hidden recess. Thus they would glide on without a word. On such excursions they deemed it necessary that silence, vigilant and constant circumspection, and a readiness that was never off its guard to spring forward in an instant, whenever an emergency might arise requiring sudden action, should be maintained without any intermission; for besides the danger that by inattention they might miss

their game, their own personal safety was at stake. A wild beast might at any moment spring upon them from a thicket, or a shower of arrows from a party of human enemies come whistling through the air from some unobserved ambuscade.

All their faculties were thus kept, on these excursions, in a state of close and constant tension, and being engaged as they were, for a great portion of their time, in these pursuits, they acquired the habit of being silent, grave, watchful and cunning, in all their demeanor.

NIGHT HUNTING.

Among some tribes a practice prevailed of hunting deer in a very singular way, and one in which there must sometimes have been produced a very striking and picturesque effect. The method was by fascinating the deer, as it were, by means of a bright fire made to float down at night on a solitary stream. The fire was built upon the bow of a canoe—a small platform covered with sand having first been made there to serve as a fire-place. Behind the fire a thick screen, made of the branches of evergreen trees, was placed, and behind this screen the hunter was concealed, armed with his bow and arrow, and ready for instantaneous action.

The deer, seeing this bright light upon the water, would come down to the brink and gaze at it, under the influence of a sort of fascination, by which he was spell-bound, as it were, and held motionless on the shore until the boat came near enough for the hunter to transfix him with his arrow.

SNOW SHOES.

The snow shoe which the hunter used in winter was substantially a flat piece of basket work, of an oval form, which formed a broad extension of the sole of his moccasin, and prevented his foot from sinking beneath the surface of the snow, whether it was the light, powdery drift of a fresh fall that he was walking upon, or the damp, heavy mass into which the beams of the sun transform the old snow of the woods and fields in the spring.

A snow shoe, such as the Indians used, is made as follows: First, a strip of flexible wood is bent into an oval form for the outside frame. Two bars are then carried across from side to side and lashed to their places by thongs of green hide. These bars serve the double purpose of bracing the outer rim and keeping it to its form, and also as points of support for the heel and toe. The interstices of the frame thus made are then filled by stretching a

WALKING ON SNOW SHOES.

skin over them and sewing it to the outer rim, or by weaving in, over the intervening space, a sort of basket-work of thongs.

When the shoe is to be put on, the toe is slipped under a strap attached to the front bar and is fastened there. The heel is not fastened, but rises from the shoe when the foot is lifted, so that the shoe is raised and moved by the toe alone. Indeed, the heel of the snow shoe is not raised at all in the act of walking. The toe only is lifted, and the heel is dragged along upon the snow till the toe is put down again. Of course, it is only a very inconvenient and shuffling kind of walking that can be performed in this way, but it is much better than sinking at every step two or three feet into the snow.

ADVENTURES IN THE WOODS.

Of course the Indians, in their excursions in the forests, were sometimes themselves attacked by wild beasts that had been made fierce by hunger or had become excited in other ways. The forests which they traversed were inhabited by bears, wolves, wild cats, and other ferocious beasts of prey, that often, when hungry, would attack men. And even the more gentle and peaceable animals, such as the buffalo and the moose, during certain

seasons and in certain states of excitement, sometimes became very formidable. The Indian was generally prepared for these encounters, and, notwithstanding the inferiority of his weapons, he almost always came off victorious from them.

A story is related of a young Indian who had been setting traps in the woods and was returning home, when suddenly he saw among the trees a large moose coming toward him with a very threatening air. He had nothing with him but a knife —one probably made of stone. He retreated behind a tree; the moose advanced. He watched his opportunity and fell behind another tree—the moose advancing all the time and tearing up the ground with his hoofs, evidently in a state of great excitement. The Indian contrived, while dodging about from one tree to another, to get out his knife and cut a pole. He also pulled off one of his moccasins and drew out the string which tied it. By means of this string he lashed his knife to the end of his pole, thus forming a rude sort of spear.

All the time while he was making these preparations the moose was hotly pursuing him, and he could only keep out of his way by running from one tree to another, by which means, however, he could only gain a moment's shelter at a time.

When at length the weapon was completed he attacked the moose in his turn, aiming his thrusts at the animal's throat, and still seeking shelter behind a tree after every blow. At length, after a long contest, during which many wounds were given, the moose became exhausted with his frantic exertions and his loss of blood, and he was finally killed.

When afterwards the friends of the Indian came with him to the place, to secure the carcass, they found the grass and the underbrush trampled down and covered with blood for a great distance around.

FISHING.

The Indians evinced a great deal of ingenuity in their contrivances for fishing. They could make a sort of twine by twisting together the fibers of a certain kind of bark, and with this they could make nets. In setting these nets they used pieces of wood for floats, and stones for sinkers. In the winter they would sometimes set these nets beneath the ice by making a row of holes in the ice along the line where they wished the net to be placed, and then they would contrive by some means to pass the net underneath from one hole to another, till it extended the whole length of the

line, and when in this position the stones would carry it down to the bottom.

BOW AND ARROW FISHING.

Sometimes in the summer they used to take fish by shooting them with an arrow while they were

swimming in the water, they themselves standing on the bank and watching till they saw the fish come sufficiently near. In such cases a string was attached to the arrow, by means of which the fish could be drawn to the land and the arrow also recovered.*

It is astonishing to what perfection of workmanship some of the Indians attained in the fabrication of their bows and arrows. The bows were formed of various materials, and sometimes, as, for example, when they were made of substances like horn, they were spliced and strengthened in a very ingenious manner. A western traveller saw one a few years since in the hands of a chief which was worth the price of two horses, and he actually bought two horses, at twenty-five dollars a piece, to give in exchange for the bow. The string was made of the sinews of a deer.

* Any young reader of this book, who may feel disposed to ascertain practically what degree of difficulty attends this mode of fishing, may easily make the experiment by heating a large fish-hook in the fire, in order to take out the temper, and then carefully straightening it and inserting it into the end of his arrow, and shooting at any fishes which he may see swimming near the shore. Before he succeeds in hitting many of them, he will have to learn something about the refraction of light, as affecting the apparent position of objects seen under water, which boys are not all supposed to understand.

The arrows, too, were very nicely made. There were two kinds, one for hunting and one for war. A good quiver would contain a hundred arrows, and an expert hunter could, if necessary, draw and shoot fifteen or twenty in a minute, running all the time at the top of his speed, either toward or from his enemy or his game.

Sometimes, instead of shooting the fish with arrows, the Indians *speared* them through the ice. In this latter case they would first make a hole in the ice, and then lie down upon their faces over it, so as to look into the water. They would then cover their heads with a mat or with evergreen boughs, in order to protect their eyes from the glare of the sun, and in this way they could see almost or quite to the bottom. They would then put down through the hole a little fish on the end of a pointed stick for bait. They would hold this stick in the left hand, and with the right they would hold the spear, and when the fish came to the bait, with a sudden and very dexterous thrust of the spear they would impale him.

They had a very ingenious sort of spear which they used on this and on other occasions. It had several prongs, and each prong was armed with a sharp point made of bone or of horn, and dexterously fastened to the wood in such a manner that

it could be thrust into the fish, and yet so *slightly* fastened that when the fish struggled to escape, the point would come off and remain sticking in his flesh. There was a cord attached to the point, which passed up into the hand of the fisherman. Thus, when the fish was pierced and attempted to swim away, the fisherman could control his motions by the line, just as an angler does at the present day, and so finally, when he became exhausted, bring him to the land. This was the nearest approach to our contrivance of a fish-hook which they were able to accomplish. Some of these spear-heads were very nicely made, and were barbed by means of a second point delicately lashed to the principal one at the proper angle. Sometimes these points were made of thorns.

VARIOUS MANUFACTURES.

The Indians were accustomed to fabricate various other articles of simple construction and use, such as a sort of awl, or rather stiletto, from a thorn, by which, in sewing, they made holes for the thread, in the skin, or the birch bark, or whatever the material might be that they were at work upon. Besides leggins and moccasins, they made a number of other useful articles by means of these needles, such as pouches to hold tobacco, and small

bags called paint-bags, to contain ochres and other pigments which they used to paint their faces with, and also quivers to contain their arrows. Some of these things were made plain, but others were ornamented with embroidery, fringes of dyed hair, feathers, porcupine quills, and other such things, in a most elaborate manner.

In weaving mats they used a long, slender piece of bone for working in the filling—the rushes forming the warp. This bone served the purpose of a shuttle, and the mats woven by it were very compact and strong. The shuttle had a cleft formed in each end, so that the thread that was used for the filling could be wound upon it.

They manufactured also a great variety of pipes, some of them considerably artistic in form and finish. The material of these pipes was usually some sort of stone soft enough to be worked by such tools as they could command, but often they were made of clay and baked in the fire. When made of stone the bowls were ground out by means of a hard-pointed stick, of the shape of the intended cavity, worked with sand and water.

PAINTING THE FACE.

The custom of painting the face and other parts of the body seems to have originated in that of

oiling the skin, which, it is said, produced a salutary effect in the summer by checking the perspiration in some degree, and defending the person from the attacks of insects. This latter end was the better attained when some foreign substance was mixed with the oil, and in choosing the substance to be applied it was natural that savages should soon learn to fancy something that was ornamental as well as useful. In certain tropical countries, where the natives are in a state of great barbarism, a custom prevails of anointing the body with a wash of thin mud or clay, which, when it is dried and hardened, forms a coat that the proboscis of gnats and midges cannot penetrate. The Indians, with their colored ochres ground in oils which they had obtained from the beavers and the bears, considered themselves doubtless on a far higher level of refinement and civilization than such poor savages as these, daubed with a mere paste of clay.

THE TIKKINAGON.

Although the women were very little in the habit of decorating themselves, but surrendered all fringes and feathers and other such finery to their husbands and sons, they sometimes expended a great deal of time and labor in making and deco-

rating the little cradle, if cradle it may be called, which was prepared for the baby. In the language of some of the tribes it was called a Tikkinagon.

This contrivance, as has already been said, was formed of a board, or of some flat fabric of their own make equivalent to a board. Near the foot of it was a projection like a shelf to support the baby's feet. This projection was often curved so as to come up a little way on each side of the legs, in order to support them laterally. There was a socket made for the head, which was padded with soft moss, and there was a strap which came over the forehead when the baby was put into its place, so as to stay the head and keep it from rolling about. There were other bands which passed across from side to side over the breast and thighs of the baby. The whole was often very elaborately made, and all the bands and borders were ornamented with carvings and embroidery in a very curious manner.

The position of the poor baby, when put into a Tikkinagon, was, of course, fixed and immovable, for his head and limbs were fastened in every part, so that he could not move them at all. In this condition he looked more like an Egyptian mummy that had been three thousand years embalmed, than like a living child just coming forward into being.

He bore the confinement, however, with a stoicism characteristic of his race. Whether in his rigid and unyielding couch he was strapped to his mother's back upon a journey, or laid down upon the bottom of a boat, or hung up in a tree, he was silent, patient, motionless, and, to all appearance, totally unconcerned; thus showing that the very low degree of sensibility, both to excitement and to pain, and the emotionless and passive taciturnity which so strongly mark the race, were qualities native and hereditary, not acquired.

The Tikkinagon, however, sometimes contained a slight recognition of the baby's claim to be provided with something to occupy and amuse him, as a strip of elastic wood was not unfrequently attached to the board, with certain little shells and pebbles fastened to the end of it, in such a manner that, when the board was swinging from a tree, the little nursling would have those toys jingling before him.

FIRE.

The Indians manifested much ingenuity in their mode of obtaining fire. It was very seldom that it was necessary to do this by artificial means, for they were very careful not to allow the fires in their wigwams to go out; and if at any time one went out the others were at hand from which to renew

it. Preserving their fires was thus an object of special attention. At certain places where councils were held provision was made, as in the case of the vestal temple in Rome, for keeping up a perpetual fire.

Still it would often happen that hunting parties far away from home, and sometimes the inhabitants of a solitary wigwam, would be without fire, and without any means at hand of obtaining it except by some artificial process. It is well known that all friction produces heat, and that the friction of two dry pieces of wood, if sufficiently violent and long continued, will inflame them, but it is very difficult, without some appropriate machinery, to maintain a powerful friction long enough to produce the effect. Very few civilized men can get fire from dry wood by such a process.

The way in which the Indians managed it was this: They would first make a small cavity in a piece of very dry wood of a certain kind—it was only wood of a certain kind that would answer the purpose. They made the cavity by boring into the wood with the point of a sharp stone. Then they would select a long, round stick—which must be also perfectly dry—and form the end of it to a point rudely fitting the cavity which they had bored.

To perform the operation, after the arrangements were thus made, required three men. Setting the stick upright in the hole, one of the men would take hold at the top, and by rolling it to and fro between his two hands would cause the point to turn rapidly this way and that in the cavity. He would bear down also with his hands as he rolled the stick between them, in order to keep the point of the stick in the hole and also to increase the friction. But, in consequence of this bearing down, his hands would gradually descend as he rolled. When he had nearly reached the bottom the second man stood ready to begin at the top by taking the stick between *his* hands in the same manner. By this means the rotation of the point of the stick in the hole was kept up without any intermission until at length smoke, and soon afterward sparks of fire, would appear.

The third person engaged in the operation stood by all the while watching the process, and holding a piece of punk, or *spunk*, as it is sometimes called, in his hand, ready to catch the first spark as soon as it should appear. As soon as his punk was on fire he would blow it with his breath, and finally, by means of it, set fire to a little heap of dried leaves and sticks which he had previously collected for the purpose.

WAMPUM.

One of the most curious things connected with Indian ingenuity and art was wampum. Wampum served many important purposes in the domestic and social economy of all the tribes. It was used as a material for ornaments, as money, and also as a means of making records and documents of all kinds.

It consisted of strings of what might be called beads. These beads were made of shells found upon the sea shore, and worn to a proper form by being rubbed upon stones of a sandy texture. They were flat and round, about half an inch in diameter, and perhaps an eighth of an inch thick. There was a hole in the center of each by which it could be put upon a string. There was a certain number which formed what was called a *string*, and a number of strings fastened together, side by side, formed a *belt*.

There were two principal kinds of beads, the white and the purple. The white were made from any shell that would furnish material of that color, and were of much less value than the others, which were made of shells that were more rare.

The strings and belts of different colored beads, variously intermingled, were used a great deal for

ornaments, in the form of bracelets, necklaces, and the like. They were also used as money. For a small purchase a *string* was sufficient, and for a larger one a *belt*. Sometimes, to adjust the payment exactly to the price agreed upon, one or more strings would be attached to a belt, or additional beads to a string.

After the white men came into the country, and by their dealings with the Indians established, in some sort, the relative value of these beads and English money, six beads of the common sort were reckoned at one penny.

In the treaties made by the early settlers with the Indian tribes, and in various other transactions in which they were mutually concerned, we read of great quantities of wampum being passed from one party to another in making payments. In such cases the amount was reckoned by fathoms, and many hundreds of fathoms were sometimes stipulated for, to be received or paid in important transactions. When the Indians had these large amounts to pay, it sometimes required many months for them to make up the sum, and in such cases they would often pay a portion on account, and ask an extension on the balance due.

Of course, the wampum so paid to the colonists was of no use to them except to pay back to indi-

vidual Indians again in exchange for baskets, furs, skins, and other articles that were really useful to the settlers.

WAMPUM USED FOR RECORDS AND DOCUMENTS.

Another very important use to which wampum was applied was for records and accounts, and indeed for documents of all kinds. The people had a way of arranging beads of different colors so as to serve as symbols of various kinds. For example, one arrangement denoted a beaver skin, another a certain amount of corn. Another combination would denote a promise to give or to pay, and others still would represent the persons who were parties to the transaction. On the same principle there were symbols to denote days, or weeks, or months, and others representing different numbers. It is obvious that by combining these symbols in a proper manner a rude memorandum might be made of any simple transaction, which, if it could not be perfectly understood without explanation by a third person, was at least a very good memorial for the use of parties to it.

In one respect this mode of executing bonds and promissory notes was superior to ours, inasmuch as in the case of the failure on the part of the promissor to perform his promise, the obligation

which he had given was not, as with us, waste paper, but, so far as it went, it was cash in itself, and could be spent as such like any other money.

TREATIES AND PUBLIC RECORDS.

Treaties were made in this way, and records kept of all important events and transactions in the history of the tribes; and it is said that at stated periods the great sachems were accustomed to assemble around their council fires and look over the public wampum, to refresh their memories in respect to the meaning of the different strings, and to explain it to the young chieftains, in order that a proper understanding of the facts and transactions recorded by them might be handed down from generation to generation.

It is obvious that without some precaution of this kind the precise significancy of these rude records would soon be lost. And yet it was found that the memory of the parties to any transaction, when assisted by a memorandum of this kind, was exceedingly tenacious. A story is told of a European who, having received some favor from an Indian, gave him a string of wampum, saying that it was a pledge that he was the Indian's friend, and that if any occasion should ever arise he would serve him to the utmost of his power. *Forty*

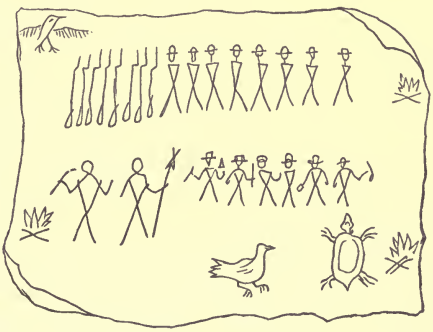
years afterward the Indian, being then old, friendless and destitute, came to the gentleman, bringing the wampum with him, and claimed the performance of the promise, offering the wampum at the same time as proof that the promise had been given. The gentleman at once acknowledged the obligation and honorably fulfilled it.

PICTORIAL WRITING.

A great number of the Indian tribes had another mode of recording transactions and events besides this contrivance of wampum, and that was by rude drawings representing pictorially the transaction or event which they wished to describe. The material on which these drawings were made was usually birch bark, which makes a very good paper for such a purpose. But sometimes the figures were painted upon the smooth surface of a rock by the wayside, or upon the stem of a tree, the rough outer bark having been first scraped away.

For the purpose of making these records, every considerable hunter had a certain symbol, usually the form of some animal, which stood for his name, and was known to all his acquaintances. There was some sign to show when the figure of the animal was to be understood in this symbolical sense,

and when it was to be taken literally. All visible objects were represented, of course, in rude drawings, in outline, of the objects themselves. Then there were certain principles of arrangement, and various arbitrary signs, that were well understood among the people, which, in connection with the use of these figures, enabled them to communicate quite a complicated piece of information in a comparatively simple yet intelligible manner. This mode of communicating ideas will be best illustrated by an example.



SPECIMEN OF THE WRITING.

The engraving is the exact copy of a notice posted up on a pole in the woods by the Indians of a certain company that had encamped there during the night, and which was left in order to give information respecting themselves to others who might afterwards visit the spot. It was a company consisting chiefly of Europeans, though there were two

Indian chiefs who acted as guides, and it was these two Indians who posted the notice. The European portion of the party consisted of a commander and five persons appointed to various functions under him, such as secretary, surveyor, mineralogist, and the like. These are represented by a row of figures in the center of the picture, reading them from right to left in the order in which such a column would march. The first man is the commander, as is denoted by his sword. The others are represented by appropriate symbols—the secretary with a book, the mineralogist with a hammer, the surveyor with instruments, and so on. These objects which appear small and indistinct in the engraving, which is much reduced, were large enough to be distinct in the original. That these men were Europeans is denoted by their wearing hats.

Next to them, at the *end* of the middle line, to the left, are two Indians, shown to be such by their being bare-headed. Beyond is a fire, showing that these persons formed one mess at their encampment.

Above is a line of figures denoting that the party was escorted by eight soldiers armed with muskets, who together formed another mess, as is denoted by their fire. The men and the muskets

are represented separately. This was to simplify the work of making the drawing—it being less difficult to draw the guns by themselves than in the hands of the men. On the corner below are delineated the figures of two animals which had been killed the day before for food.

This document, executed upon a large piece of birch bark, was attached by the Indians that made it to a pole which was set in the ground in a slanting direction, the top of the pole pointing out the course which the party making the record had taken in continuing their journey.

It is curious to observe in the work, especially in the mode of drawing the men, how ingeniously the artists contrived to make their delineations as much as possible by straight lines, and with very few of these in each figure. This was quite necessary, considering the intractable nature of the materials which they had at command, and the very moderate degree of skill which they were able to exercise in using them.

CHAPTER VIII.

INDIAN LEGENDS AND TALES.

TRAVELERS AMONG THE INDIANS.

In every period since the first arrival of Europeans in the country there have been many persons who have taken great pleasure in visiting the Indian tribes, and even in living among them for considerable periods, for the purpose of studying their manners and customs, learning their language, and listening to their legends and tales; and many of these visitors, on their return to the civilized world, have published what they have thus discovered.

The tales and legends which some of these travelers say were related to them from time to time, as they sat on some summer evening in the open air amid a little circle of listeners gathered from an Indian encampment, or assembled in winter around the wigwam fire, are, or at least many of them are, exceedingly curious, and they give us considerable insight into the manners and customs,

and still more into the ideas and sentiments which prevailed among the different nations. The following are among some of these legends. The first is an account of the origin of man, as given by a tradition handed down by one of the western tribes:

ORIGIN OF MAN.

In ancient times there was a snail living upon the banks of the Mississippi. He lived there in peace and quietness for some time, until at last a great inundation came and he was in danger of being drowned. He crawled upon a log to save his life, and while he was upon it the log was lifted up by the water and borne away down the stream.

At length it was cast upon a bank and the snail crept off from it to the shore; but instead of landing upon hard ground he found only mud and slime. He crawled along over the soft surface a little way, but presently the sun came up, and, shining very hot, it suddenly dried up the mud, and, as it were, baked the poor snail in.

He struggled for some time to get free, and at last, faint with hunger and exhausted with fatigue, he was about giving up in despair when suddenly he found himself undergoing a strange transformation, and at the same time increasing marvellously

in size. Legs were growing out from him below and a head and arms above. In short, he found himself turning into a man.

The transformation was soon complete, and he stood out upon the bank changed into a perfect human form, but emaciated and weak, and more hungry than ever. Indeed, he was almost starved. He was naked, too, as well as hungry, and thus his limbs were exposed and defenceless. Though he saw birds flying around him in the air, and land animals moving to and fro, he did not know how to proceed in order to procure food and clothing from them.

At length the Great Spirit appeared to him and called him by name, expressing, at the same time, a feeling of kindness and sympathy for him in his destitute and helpless condition.

The Great Spirit brought him a bow and arrow and showed him how to shoot a deer with it. When the deer was killed he showed him that the flesh was good for food.

The Great Spirit then brought him fire, and showed him how he was to proceed, by means of it, to cook his food.

When the man had cooked his food and eaten it and thus appeased his hunger, the Great Spirit told him that cold winds and rains would come,

and that he must make himself some clothing to protect his limbs from them; and he taught him how to make a garment from the skin of the deer which he had killed.

The Great Spirit also put a string of wampum round his neck, saying to him as he did so, "This is the badge of your authority over all the animals of creation."

The Great Spirit then disappeared.

The man, after this, in rambling on through the country, met the beaver. He commanded the beaver to submit to him, and showed him the necklace of wampum which the Great Spirit had given him as the badge of his authority.

But the beaver, instead of simply complying with this demand, took the man home with him to his lodge. The man was very kindly received by the beaver's wife and children, and he learned from inspection of the lodge in which they lived how to build a house for himself.

Very soon he fell in love with the beaver's daughter, and demanded her in marriage. His demand was acceded to, and in due time the marriage was celebrated.

It was a very great wedding. All the birds in the air and all the animals in the woods were invited to it, and great were the festivities and re-

joicings. From this union all the races of men were descended.

The narrator of the legend, by way of giving his authority for it to the traveler who recorded it, closed with these words:

"So it is said by the old people."

There is among the other stories one which seems designed to illustrate the value of a contented and happy disposition.

OLD BOREAS AND SHINGEBISS.

In ancient times there was a man named Shingebiss. He lived in a lodge which he had built for himself on the margin of the water.

When the winter came it was very cold. Shingebiss had four logs of wood, and as the winter was to be four months long, he had just one log for each month, and he was consequently obliged to keep very little fire, so as to burn his logs very slowly, in order to make them last until the spring.

He had nothing for food but the fish which he could catch in the stream. But the stream was frozen over so hard that it was impossible to break through the ice. He, however, looked about and

found openings or weak places where the flags and rushes grew, and through these openings he caught his fish. When the fish were caught he dragged them home across the ice, strung together upon a string.

At last old Boreas* saw him and said to himself, "This man is as contented and happy in this cold season as if it were June. He seems to despise *me*. I'll go and pay him a visit, and see what I can do to make him feel my power."

So old Boreas went to Shingebiss' lodge, and entering in, he took his seat by the door. He found Shingebiss lying down before his fire singing a song.

Old Boreas blew upon him and made him very cold on the side that was turned away from the fire. So Shingebiss turned first one side and then the other to the fire, but still went on singing his song.

Then old Boreas went out upon the stream and froze up all the openings which the flags and rushes had made.

"Now," said he to himself, when he had done this, "he can get no fishes, and will starve."

But Shingebiss did not despair. He continued

* The name in the original is the Indian name for the north wind.

his search upon the ice till he found new openings, and by patience and perseverance he broke open those that Boreas had closed up, and so caught more fishes; and when he had caught them he dragged them home to his lodge, over the ice, as happy as ever.

"He must be helped by the Great Spirit," said old Boreas. "I can neither freeze him nor starve him. I will let him alone."

There is a love story, which shows that the instincts and sentiments of woman were the same in those rude states of society as among the most highly civilized nations on the globe. It is as follows:

THE STORY OF AMPATA.

Ampata was the wife of a brave young warrior. She had two children. She lived for a time with her husband and children in great happiness. Sometimes their home was on the prairie, sometimes they built their wigwam in the forest near the banks of a stream. Ampata used to paddle her canoe up and down the rivers in search of bulrushes for mats, or bark for her wigwam, or fuel for her fire. In summer they lived in open ground, but in the winter they chose a more shel-

tered position on the margin of a wood, where it opened toward the sun. Thus their lives flowed on very smoothly and happily.

Ampata's husband gradually increased in influence in his tribe, until finally he came to be a chief. This filled Ampata's heart with pride and joy, and she loved her husband more than ever.

But the increased rank and importance to which her husband attained, as Ampata soon discovered, interfered very much with the domestic peace and quietness which they had before enjoyed. He now became a public man. His wigwam was always filled with visitors, and as his consequence in the nation increased, his ambition, instead of being satisfied, became excited more and more. At length, in order to widen and extend his influence, he conceived the idea of taking a second wife, the daughter of a noted chieftain who lived near.

When Ampata heard this she was greatly alarmed. She remonstrated with her husband, but he would not listen to her. It would give him greater influence in the tribe to marry another wife, he said, and marry her he would.

Ampata immediately resolved that she would not stay in the lodge to be thus humiliated by her husband. Accordingly, before he brought his new

wife home, she fled, taking her two children with her, and returned to her father's lodge almost broken-hearted.

She remained with her father and with his connections during the winter, but her grief and despondency were not at all relieved by the lapse of time. In the spring, when her father's party were coming down the Mississippi with the furs which they had taken during the winter, she came with them. She had her two children with her in her canoe. When at length the boats began to draw near to the falls of St. Anthony, and turned aside at the commencement of the rapids to go to the land, she did not turn with them, but pressed on into the middle of the stream.

The whirl and turmoil of the water became now so violent that the boat was borne onward with great speed, and the paddle was no longer of any avail. So Ampata rose from her seat, and holding the paddle extended in her arms made her farewell lament in the following terms:

"It was him only that I loved, and I loved him with all my heart. It was for him that I prepared the fresh-killed game, and swept with boughs the hearth before my wigwam fire. It was for him that I dressed and sewed the skin of the deer, and embroidered the moccasins that adorned his feet.

"How I waited in my lodge the live-long day for his return from the chase, and how my heart was filled with joy when I heard his footsteps coming!

"My heart was bound up in him. He was all the world to me. But he has left me for another, and life is now a burden which I cannot bear. Even my children add to my grief. I see in their faces his image, and they bring him continually to my mind.

"I have prayed to the Great Spirit to take back the life that he gave, as I do not desire it any longer, and I am now on the current by means of which he is going to fulfill my prayer. I see the white foam of the water—it is my shroud. I hear the roaring of the fall—it is my funeral song. Farewell."

It was too late for her friends to arrest her course. They saw the canoe enter the foam; they saw it poise itself for a moment on the brink of the cataract, and then it disappeared in the awful abyss below.

The story concludes by saying that sometimes now, the benighted traveler, standing at midnight on the shores of the river, sees by the light of the moonbeams, in the openings of the mist and spray, the form of Ampata's canoe just ready to take the

fearful plunge. It appears there for a moment on the brink, and then the mist closing over it shuts it out from view.

This story of the poor, disappointed, and forsaken wife may have been true, precisely as it is here related. The next is of a very different character, being an old tradition of a very decidedly marvelous type. It explains how it happens that the dormouse is so small.

TRAP SET FOR CATCHING THE SUN.

In former times, when the animals that lived on the earth were more powerful than men, they killed and devoured all but two persons—a girl and her little brother. These two made their escape, and, flying far away into the forests, they lived there in a secret place, in great fear.

The girl was the oldest of the two, the boy being so small that he was utterly helpless. A big bird might have flown away with him. The girl took all the care of providing food for both, but when she went into the woods to get food or fuel she always took her little brother with her, for he was too small to be left alone.

At last she made him a bow and arrow of a size adapted to his strength, and when she went next into the woods she said to him:

"When I have done chopping in the woods and am ready to go home, I will leave you behind a little while with your bow and arrow, to shoot little snow birds that come to pick up the worms that drop out of the wood that I have been chopping."

THE CHILD AND THE SNOW BIRDS.

So she left him in the woods and went home. He staid and did his best to kill the snow birds, but he did not succeed.

When he came home he looked disappointed and discouraged, but his sister told him that he must not despair.

"You must try again to-morrow," said she. The next day she left him in the woods again, and toward nightfall she heard his little footsteps on the snow, outside the lodge, as he was coming home. When he came in he threw down a snow bird that he had killed, and seemed very much pleased.

His sister cut the bird in two and used it, half one day and half the next, to season the broth or porridge which she made for supper.

After a time the boy killed ten birds, and their skins, sewed together by his sister, made him a little coat.

He was very much pleased with his coat, but one day having lain down in the sun and gone to sleep in a place where the snow had been melted away and the ground was dry, the sun singed his coat and made it shrink, so that when he woke up it was too tight for him.

He was very angry with the sun for this, and he declared he would set a snare for him and catch him, to prevent his doing such mischief any more. He asked his sister to make him a cord.

After several trials she succeeded in making a cord that he thought would do, and so he set out one night a little after midnight and went through the woods to a place where the sun rose. He

made a slip noose in one end of his cord, and then set it slyly in the trees, in the place where the sun was to come up.

He succeeded very well in his design. The sun, in coming up through the trees, got caught in the noose, and his beams became so entangled in it that he could not rise.

The animals in the forests were all very much frightened when they found that it continued dark that day. They ran to and fro and made great inquiry, and at last they found out what the difficulty was. The sun had been caught in a snare.

At first they did not know what to do. They soon concluded, however, that the only remedy was for them to send some gnawing animals to gnaw off the noose. But none dared to go for fear of being burnt to death by the sun.

At last, however, the animal now called a dormouse, which was then the largest gnawing animal existing, was persuaded to go. He was selected because, being large, he would be better able, they thought, to endure the heat. So he went and gnawed off the noose and set the sun free; but he was so dreadfully burnt in the operation that, when he returned, from being the largest it was found that he had become the smallest animal of all. There was very little left of him.

And that is the reason why the dormouse is now so small.

This story suggests another legend in which the incident of the sun being caught in a trap occurs in a somewhat different form. The story is one which a French Catholic missionary learned from an Indian tribe upon the banks of the St. Lawrence, more than two hundred years ago. In respect to the state of intellectual development to which it is adapted, it stands very nearly on a level with the English nursery tale of Jack and the Beanstalk, which, indeed, in some respects, it closely resembles.

HUNTING IN HEAVEN.

There was once a man and woman traveling together in the woods, when suddenly they were set upon by wild beasts. The man was seized and devoured by a bear. The woman was also in the same manner eaten up by another monstrous animal. But their little child, who was just then born, the wild beasts left untouched.

A woman passing by a short time afterward saw the child lying alone in the woods, and was very much astonished at the sight. She wondered where its parents could be, but on looking all

around and seeing nothing of them, she took the child and carried it home to her lodge.

The boy lived, but he did not grow. He increased marvelously in strength, it is true, but not in size; so that, although he remained to all appearance a child, he became strong enough to root up great trees, and to perform other marvelous exploits. His name was an Indian word sounding as much as possible like Jackabeck.

The first thing that he undertook was to seek out and attack the monstrous beasts which had devoured his father and mother. He found them and killed them both, and he identified them as the real devourers of his parents by finding his father's beard in the stomach of one, and his mother's hair in that of the other.

In addition to his great strength he was possessed of a certain mysterious power, through which whatever he blew upon was changed by some sort of magic, just as he wished.

After a while he felt a desire to go to heaven to see what there was there. So he began to climb a tall tree, and when he got to the top of it he blew upon it, and that made it shoot out and grow up higher. He climbed up to the top again and then blew as before, and so on continually.

He thus mounted higher and higher, until at last he ascended into heaven.

He found here a delightful country, with green fields and pretty trees and flowers, and every thing charming. After walking all about the place he returned to the tree and began to descend it, intending to tell the story of what he had seen to his sister—for it seems he now had a sister—and bring her up with him to heaven, in order that they might live there for ever.

As he came down the tree he stopped occasionally by the way to build wigwams in the branches, as places of rest for himself and sister in ascending.

When he had reached the ground and had related to his sister what he had seen, she was at first very unwilling to go with him, being afraid to attempt to climb such a tall tree. But she was at last persuaded to make the attempt, and they set out together.

This sister had a little nephew whom she concluded to take with her in the ascent, and they all three began to climb the tree. The sister and her little nephew went first, and Jackabeck came on after them, in order to catch them if they should chance to fall.

Thus they went on up the tree, and whenever

they were tired of climbing they stopped to rest at the wigwams which Jackabeck had made among the branches in coming down.

After they had arrived at the top, in order to prevent any other persons from coming up after them, Jackabeck reached down and broke off the stem of the tree as low as he could.

After admiring the beauties of the country for a time with his sister, and congratulating each other on their safe and happy arrival in it, Jackabeck went off into the woods to set traps, as he had been accustomed to do on the earth below, in hopes to catch some animals.

Very early the next morning he went to visit his traps to see what he had caught. As he drew near one of them he saw in it a great glowing ball of fire. It was so bright and so hot that Jackabeck did not dare to go near it. So he ran back to his sister to inform her of this prodigy.

"Sister," said he, "there is a big fire in one of my traps, so fierce and hot that I do not dare to go near it."

"Ah! Jackabeck," said his sister, "you must have caught the sun. He was wandering about undoubtedly in the night, and has fallen into one of your traps. Go and let him out as quick as you can."

So Jackabeck went back, but he found the sun so hot and dazzling that he could not get near enough to let him out of the trap. He was greatly at a loss what to do, but presently on looking around him he found a little mouse, and he blew upon him and made him so large and strong that he could go to the trap and open it in some way so as to let the sun go free.

The sun was detained so long, however, by this accident that he failed to rise that day on earth, and so the people lost a day and spent their time during the interval in darkness, wondering what had happened to the sun.

The story that follows, it is supposed, may have been intended to present to the Indian belles the example of a species of mistake which is often exemplified in tales written for young ladies in civilized life, namely, that of acting in a spirit of proud and disdainful coquetry toward an honest lover, and so, as the proverb expresses it, going further and faring worse. It is as follows:

THE STORY OF MOOWIS.

There lived in a certain village an Indian girl who was distinguished for her grace and beauty, and was the admiration of all the young hunters

and warriors of the tribe. Indeed, she was quite a belle.

Among her admirers there was a very worthy and much respected young man, who went to visit her one day, with the intention of asking her hand. I will call him Ma-mon, that being a portion of his name. The belle, instead of receiving kindly Ma-mon's well intended attempts to please her, and giving him a respectful and proper answer, turned away from him in disdain, and dismissed him with a peculiar gesture, which, according to the Indian customs, was expressive of the utmost contempt. The young man went away very deeply wounded.

He was indeed so sensitive, and his mind was so much disturbed by this insult, that he could not recover from the effects of it. He was the more deeply and permanently affected by it from the fact that the insult was put upon him in the presence of others, so that the affair was noised abroad throughout the village, and became the common talk of the young men of the tribe.

At last the sense of shame and vexation so preyed upon him that he lost his health and strength, and almost his reason. He would lie upon his mat in his lodge all day long, silent, dejected, and with his eyes fixed on vacancy. He would take little or no food. No efforts could

rouse him from this condition. He felt abashed and dishonored even in the presence of his relatives and best friends, and no persuasions could induce him to rise.

At length the time arrived when the family to which he belonged were to take down the lodge, in order to remove to another station; but still he would not get up. So they took down the lodge from over his head, and left him there lying on his couch in the open air.

It was early in the spring of the year, and the ground was covered with snow, but the snow was hard, as is usual at that season, so that the party could travel upon it, their feet making a crackling noise as they walked along over the frozen surface. The young man remained on his couch until the last sound of the departing footsteps died upon his ear, and then he arose.

The ground that the encampment had occupied was covered with remnants and fragments of all kinds, which had been left there by the families which had occupied it. There were bits of soiled cloth, worn and tattered garments, draggled feathers, and old abandoned ornaments of all sorts, some lying on the frozen ground, and some trampled into the snow.

At the sight of all this finery Ma-mon conceived a plan of revenge.

"She thinks more of the dress than the man," said he to himself, "and I will make her a husband that will please her."

So he began to collect the old garments together, and after putting them in proper form he filled them with earth and snow, which he pressed firmly in, and thus finally produced the figure of a man. This figure he decorated with old beads, feathers, and other things which he found upon the ground, and which, by some sort of magic, he redeemed from their damaged condition and restored to their pristine beauty. The man, too, when he was finished, was endowed with the power of life and motion, though his body and limbs still consisted of nothing but frozen mud and snow.

Ma-mon put a bow and a quiver of arrows in the image's hand, and then ordered it to follow him. He gave it the name of Moowis.

Ma-mon now went on with Moowis to the new encampment of the tribe. When they arrived there Moowis attracted great attention. So well formed a man and one dressed so very elegantly had seldom been seen. No one was more pleased with him than the belle. She fell in love with him at first sight, and invited him to her

mother's lodge, where he was received with much honor.

Among other marks of attention they assigned the stranger a place very near the fire. But Moowis was afraid to take this place for fear that he might be melted by the warmth, and so, notwithstanding the urgency of their invitations, he insisted on remaining near the door.

This only increased the belle's admiration for him, as she considered it a proof of his great hardihood and power of endurance; and these are qualities which, next to courage, the Indian damsels most highly prize in their lovers.

But we must not make the story too long. The belle accepted Moowis as her lover, and they were married. Very soon after the ceremony was performed Moowis said that he must go away for a time, for there was a journey that he must take. His bride said that she would go with him. He attempted to discourage her, but she was not willing to be left.

So he set out upon his journey, his bride, according to the Indian custom in the case of man and wife, following him at a little distance. He went on at a very rapid rate. She tried very hard to keep up with him, but she found it extremely difficult to do so. She called to him

incessantly to wait for her, but he paid no heed to her cries.

Soon, too, the sun came up and Moowis began to melt away. The feathers and beads and other ornaments began, one after another, to drop off from him to the ground, and, as they fell, they returned to their original soiled and tattered condition. Still the bride pressed on, following her flying husband over rocks and windfalls, and through all sorts of rough and marshy ground. She called incessantly to him and looked for him everywhere, but there was nothing to be seen along the path where he had gone but rags, bones, old worn-out skins, broken beads, soiled feathers, and remnants of torn and tattered garments. The bride wandered on past all these things, calling continually to her husband and crying that she was lost, until at length she became perfectly bewildered and wholly uncertain which way to go. She however continued to wander about in her despair, and is wandering still, singing all the time a mournful song, in which she calls continually to Moowis, saying that she is lost, and begging him to come and save her.

OLD RED HEAD.

In ancient times there was a famous chieftain

named Old Red Head, who was so violent and lawless in his life and character, and was so great a robber and murderer, that he was feared by the whole country around. He lived on an island in a lake, and he had a boat with which he used to communicate with the shore.

He was so much dreaded by the people of the country on account of his great strength and ferocity, that even his name became a bugbear, and a great many designs were formed and plans laid for killing him. But thus far none had succeeded.

Not far from the lake where Old Red Head lived there was a family that consisted of a man and his wife, and a boy about fifteen years old.

One evening, when the man had been out all day hunting, he came home to the lodge, bringing a deer. He was very tired and very hungry. His wife began to prepare the deer for supper, and while she was doing it she asked the boy to go down by a path through the woods to the river and bring some water.

But it was dark and the boy said that he did not like to go. The father, when he heard this, accused his son of cowardice, and said, in a sneering and contemptuous manner:

"I don't think *you* will ever kill Old Red Head."

This taunt stung the boy to his inmost soul. He said nothing, but he felt very deeply wounded. All that night he lay revolving in his mind what he should do.

The next morning he asked his mother to make him a pair of moccasins from the skin of the deer which his father had killed. While she was doing this he went into the woods and made himself a bow and four arrows.

The next morning after this he rose before sunrise, and putting on his moccasins and taking his bow and arrows in his hands, he went out and shot one of his arrows into the air. It went up very high. He observed which way it inclined as it ascended, and then walked off through the woods in that direction, intending to go to the spot where it would come down.

He traveled on all day long, and at night he came to the arrow. He found that it had fallen upon a deer and killed him. The boy cut off as much of the flesh of the deer as he required, ate his supper from it, and then lay down and went to sleep.

The next morning he rose early and shot another arrow into the air. He followed this arrow, as he had the other, and found this one, too, at night in a deer which it had killed. He made his supper

from the flesh of this second deer, and then, being fatigued with his long march, he lay down and went to sleep again.

He did the same the third day and the fourth day. His arrows were then all expended. On the fifth day he wandered about without any food, and not knowing what to do. At last he became exhausted with hunger and fatigue. He sank down upon the ground, and thought that he should die.

While he was thus lying upon the ground in despair, he heard a strange sound approaching him, and raising his eyes he saw a well beaten path leading from the margin of some water to a cabin which was very near him, and which he had not observed before, and up this path a strange looking old woman was coming, thumping her stick upon the ground as she came. She wore a sort of cloak, which was made of the scalps of women, and to the top of her staff a number of birds were fastened by means of strings tied to their feet. These birds fluttered over the old woman's head as she walked along, and continued singing all the time.

The woman went into her cabin and took off her cloak. As she took it off she shook it, and as she did so sounds of loud and continued laughter came from the scalps of which it was made. These

sounds continued until she had put the cloak away.

The old woman then came out of the cabin and advanced to the place where the boy was lying. She accosted him kindly, and raising him up, led him into her cabin and gave him some food.

Encouraged by her kindness the boy told her his story. He gave her an account of what had taken place in his father's lodge, of his father's cutting sarcasm, and of his having left home on account of it.

She listened attentively, and when he had finished she told him that he must not take what his father had said to him too much to heart.

"Be of good cheer," said she. "You *shall* kill old Red Head, and I will show you how to do it."

So she made the dress of a girl for him, and fashioned him a great many beautiful ornaments. She put the dress upon him and also the ornaments. There were feathers for his hair and bracelets for his arms, and a necklace of beads and a girdle. In the girdle she placed a blade of grass of a certain kind, which was pretty broad and stiff, and sharp at the edges.

"Now," said the old woman when the boy was ready, "you look like a beautiful girl."

So she directed him which way to go, and told him that he must journey on by that way until he came to the shore of Red Head's lake, opposite the island.

"There," said she, "you will find a great many young men, who will fall in love with you, and want to marry you. But you must tell them that you are determined not to marry anybody but Red Head himself, and that if he will not come for you in his canoe, and take you to his island, you will go back again to your home.

"When he comes you must go with him and marry him, and then after the marriage you must seize the first opportunity to cut off his head with the blade of grass."

So the boy, dressed thus in the guise of a girl, went on in the direction which the old woman had pointed out to him, till he came to the shore of Red Head's lake. There everything occurred just as the old woman had predicted. The young men came around the supposed damsel and wished to marry her. She refused them all, and said that she would marry no one but Red Head himself, and that unless he would come to the shore for her in his canoe she would go back again to her home.

When this was made known to Red Head he

determined to come to the shore for the girl. So he caused his boat to be brought out. The frame of this boat was made of living rattlesnakes, and they, by some sort of magic, were endowed with the power of knowing when anybody came into the boat with any evil or treacherous designs against their master, and of signifying it by hisses and contortions.

Accordingly, when the pretended girl embarked on board the boat, they began all to hiss, and to writhe and twist about in the most horrible manner. But Red Head was so captivated with the beauty of his prize that he would not heed their warnings. He went on with the boy to his island.

There, after meeting with various adventures and several narrow escapes from detection which cannot here be detailed, the boy succeeded in dissipating all Red Head's suspicions, if he ever had any, and the marriage ceremony was performed. A great concourse of people came to attend the wedding. Immediately afterward, or as soon as the new married pair were alone, the boy took Old Red Head's head in his lap, as he reclined on the ground by his side, and drawing out the sharp-edged blade of grass from his girdle, he cut it off by a single stroke.

He then made his escape, taking the head with

him. He carried it first to the old woman's cabin to show it to her, and then went with it home to his father's—his heart filled with pride and exultation.

He was received with every mark of consideration and honor by his family and tribe, and continued to enjoy great renown as long as he lived as the slayer of Old Red Head.

HOW ALGON GAINED HIS WIFE.

Algon was a very brave and handsome young hunter. One day when he was roaming over the plains in search of game he suddenly came to a well-worn circular track in the grass, with no path leading to it from any quarter.

This seemed to him a strange sight. How could such a track be made without people to make it? And how could people come to make it without leaving any signs of a path, or even of footsteps, in the grass where they came?

While he was pondering on this mystery he heard a rushing sound in the air, as of a great bird flying, and looking up he saw a large wicker basket descending, with twelve beautiful maidens in it. He stepped back into the thicket, where he could conceal himself from sight, and remained there watching.

The basket or car containing the twelve girls came gently descending toward the ground, being let down by cords from above. As soon as it reached the ground the girls leaped out, and all immediately went to the ring and began dancing about it in a charming manner.

Algon watched them as they danced, and finally fixed his eyes and his heart upon the youngest of them, who seemed to him to be the most beautiful of them all. He came forth from his thicket intending to seize her, but as soon as the maidens saw him they seemed exceedingly terrified. They all with one accord sprang for the basket, and, climbing into it as nimbly as possible, they were drawn up again into the sky and disappeared.

The next day Algon went again to the place where he had seen the ring, in order to watch for the coming of the girls—expecting to see them descend, as on the preceding day, from the sky.

This time, however, instead of going in his own proper form, he changed himself into an opossum, a very curious and artful animal which hides cunningly among the branches of a tree. In this guise he took his place in a tree near the ring. Before long he saw the basket coming down out of the sky. When it reached the earth the girls descended from it and began to dance again, but

before Algon had time to come down from his tree and go toward them the youngest of the girls spied him and gave the alarm, and the whole bevy immediately sprang to their basket, climbed into it as nimbly as they had done before, and were drawn up into the sky again.

The next day Algon determined to go once more, but now he concluded to change into a smaller animal than the opossum, in order the more easily to escape observation. This time he resolved to be a mouse.

So when he reached the place where the ring was formed, he looked about in the thickets near, and presently found a piece of the hollow root of a tree lying upon the ground, with a nest of mice in it. He took up the piece of root, nest, mice and all, and carried it out of the thicket to the ring, and there laid it down upon the grass near the outside of the ring. Then he changed himself into a mouse, and took his place with the others in the nest.

He had not been there long before he saw the basket coming down out of the sky as before. The girls stepped out of it and came toward the ring. One of them saw the fragment of the root upon the ground.

"Ah!" said she, "what is this? This was not here before."

So they all stopped and looked at the root, and then began to pull it to pieces. At this the mice all came out of the nest, and ran about upon the ground. The girls immediately began to kill them. At last they killed all but Algon. He, in order to save himself, turned back into a man.

The girls, when they saw one of the mice expanding and assuming the form of a man, screamed and fled. In the meantime Algon's transformation was complete, and he sprang after them. He succeeded in seizing the youngest, his beloved, and in holding her, notwithstanding her struggles, until the others had reached the basket, and had gone off again into the sky.

Being thus made captive the girl soon concluded to resist Algon's love no longer, but became his wife, and the wedded pair lived for a long time together in peace and happiness.

A great many other narratives of this kind might be given, but these will be sufficient. They are pretty fair specimens of the tales and traditions which are related by parents to children around the wigwam fires, and so handed down from generation to generation.

CHAPTER IX.

CONSTITUTION AND CHARACTER OF THE INDIAN MIND.

ADAPTATIONS OBSERVED IN THE FORMS OF ANIMAL LIFE.

In stocking the earth with its living inhabitants the Creator has adapted the form and the physical constitution of the animals of each several species to the character of the locality which they are intended to inhabit, and to the mode of life they are to lead. In other words, every being is endowed with powers and qualities suited to the functions which he is designed to fulfill.

Thus the giraffe, being appointed to feed on the leaves of trees, is provided with long legs and a long neck, in order to enable him to reach his food, and the chamois, having to obtain his sustenance from grass growing in the clefts of the rocks and on steep declivities, has hoofs fitted expressly to facilitate climbing, and muscles to enable him to lift himself up to any shelf among the rocks that he can reach, or to let himself drop down a descent where any other animal would be killed. Birds

that are to search for their food along the margins of lakes and ponds are furnished with long wading legs and near-seeing eyes; while those appointed to find and devour the bodies of dead animals, wherever they may lie, over a wide extent of country, have eyes endowed with a most astonishing extent of vision, and wings of prodigious strength to sustain them in the longest flights, and to carry them up to the loftiest pinnacles of the mountains.

MENTAL ADAPTATIONS.

This adaptation of the powers and faculties of animals to the duties, so to speak, which they are destined to perform in life, applies to their mental qualities, as well as to those which are more purely corporeal. A lamb, being intended to feed on grass and flowers, is gentle in spirit, and is furnished with an instinct which leads him to save himself from danger by running away from his foe. The tiger, on the other hand, is endowed with a degree of courage and of combative ardor so great that we call it ferocity; and this simply because he is to live by seizing and conquering a living and resisting prey. The fox, who is to feed upon timid animals that have wings to fly away from him, is made cunning, that he may be

enabled to catch them off their guard. For him simple strength would not be sufficient. So the dog, who is intended to gain his livelihood by the services which he renders to man, is provided with a mental constitution which leads him to attach himself to a human master, and to remain faithful to him in every extremity; while other animals, taken from their native haunts and brought artificially into this relation, are with difficulty retained, and on the first favorable opportunity fly away into their native woods again.

DESIGNS OF DIVINE PROVIDENCE IN RESPECT TO MAN.

Upon a principle somewhat similar to this the different races of men seem to be endowed with different qualities, each being adapted, both in physical and intellectual constitution, to the place it has to occupy in the history of the species.

For some reason or other which we cannot fully understand, Divine Providence has not seen fit to bring the family of man at once into the full possession of all the attainments and enjoyments of which the species is capable, or to the high social state for which their nature fits them. On the contrary, the system which has been adopted for the human race, unlike that seen in operation in respect to any race of animals not connected with

man, is that of an exceedingly slow and gradual development. The different regions of the earth have been stocked with different branches of the human family, strikingly dissimilar to each other in their persons, in their physical powers, and in their mental constitutions—each, however, being exactly adapted to the part which they are respectively called upon to perform in the great drama.

THE GREAT DIVISIONS IN THE HUMAN FAMILY.

Thus the races of Central and Southern Asia are endowed with very peculiar physical and mental powers, differing esentially from those of the prevailing race in Europe, which is called the Caucasian race, and both differing essentially also from those of the African races. The differences which exist would seem to be innate and permanent, so far as we can judge from the results—each particular branch being able apparently to attain only to a certain degree of refinement and civilization, and these remaining unchanged, or almost unchanged, for many centuries. The Chinese, the Malays, and the negroes of Africa appear to have subsisted in substantially their present condition from a very early age, while the Caucasian race has been constantly progressive, having built up in succession a great number of

independent empires. The Assyrians, the Persians, the Greeks, the Romans, and, following them, the great European nations of modern times, have entirely outstript in arts, in science, and in civilization all the other races of the globe; although many of these other races have possessed, each in its own region of the earth, equal facilities for advancement, and have held them for the same length of time.

CONSTITUTIONAL DIVERSITIES.

We must suppose, then, that there is a great and permanent difference in the physical and intellectual constitution of the different races—permanent at least in this respect, that it cannot be changed by any human means in the course of any moderate number of generations. Whether these differences have been produced by external causes, such as climate and modes of life, or by some hidden innate causes more or less connected with these, or whether they have originated in some other way to us wholly inscrutable, is at present entirely unknown. We must, at any rate, accept the difference actually existing as a fact, and conform our reasonings and our action to it—always acknowledging, however, that the inferiority of any race to ours, if we claim that such inferiority

exists, imposes upon us a special obligation to be just toward them, and to protect them in the enjoyment of all their rights, instead of giving us any authority to tyrannize over them or oppress them in any way. We may rightfully recognize and act upon our superiority to them in the social arrangements which we make, but we are bound in doing so to consider them as under our protection, and to guard their rights and provide for their welfare and happiness faithfully, honestly, and with feelings of sincere good will.

MENTAL AND PHYSICAL CONSTITUTION OF THE AMERICAN ABORIGINES.

The American Aborigines have been generally considered by mankind as a stern, taciturn, immovable, unfeeling, and yet shrewd and cunning people. Some travelers, like the celebrated Catlin, among others, who spent a great deal of time among the western tribes, maintain that the degree in which they possess these qualities has been exaggerated. Catlin found the Indians at their own homes, in the villages which they had built on the banks of the Missouri and upon the western prairies, as jovial, as talkative, and as full of life and animation as other men. But the prevailing testimony, especially in respect to those tribes that

dwelt on the Atlantic coast at the time of the first settlement of the country, represents them as exceedingly grave and stolid in all their deportment, and possessing very little sensibility of any kind. Their power to endure hunger, cold, and fatigue was surprising. This power was doubtless, in a great degree, acquired by habit, and much of their apparent insensibility was due to a feeling prevalent among them that it was weak and unmanly to complain. Still there seemed to be something in their physical constitution which gave them a greater power of endurance than belongs to the Caucasian race. They felt cold and hunger, and the pain of wounds, much less, and could consequently endure much more, with the same exercise of fortitude, than other men.

Indeed, we might have been almost certain that this would be so. The same kind and watchful Providence which gives the eagle his astonishing extent of vision, in order that he may have power to survey the vast field over which he is to seek his food, and enables the polar bear to sleep in comfort on a floor of ice where mercury would freeze, would surely not impart a delicate sensibility to the organization of a man who was to live by seeking his food in the winter in a howling forest, with a certainty of often passing days with-

out sustenance, and nights without any covering but bushes and snow.

THE TACITURNITY OF THE INDIANS.

The extreme taciturnity of the Indians was one of their most striking characteristics. We shall explain it in different ways according as we suppose, that the Indian was made to fit the circumstances in which he was to be placed, or that he was made like other men, and that the circumstances changed him. On the latter supposition he has learned to be silent, from the fact that silence is so necessary for him while prowling through the woods in search of game, or watching against an ambuscade on the part of an enemy.

But talkativeness is the result of a peculiar mental organization, leading to a lively and rapid flow of ideas, ardent sensibilities, and a quick and ready action of the nerves and muscles that are connected with the organs of speech. All this nice mechanism would be out of place, in a great measure, with these children of the forest; and, indeed, it would be worse than out of place, for it might be, necessarily for aught we know, connected with a greater sensibility to pain, which to the Indian would be a very serious evil.

We might suppose, it is true, that the inward

mechanism was with him, at birth, the same in respect to these faculties as in the Caucasian race, but that, on account of the mode of life which the Indian leads, it remained undeveloped. This is, doubtless, to some extent, true. But it would seem that the Indian children manifest from their earliest infancy the same low degree of sensibility, giving them the power of bearing without inconvenience, or at least without pain, what would be intolerable to the children of another race, which characterizes their fathers and mothers. The children seldom cry. They remain patient, strapped upon their board, looking quietly about, and content apparently with existence alone; while a white child of the same age is endowed with powers of observation and with mental instincts and propensities so sensitive and active that it craves the incessant occupation of its faculties, and scarcely ever intermits his restless activity.

Where we find peculiarities of temperament thus showing themselves at the earliest age, and continuing to mark the character and conduct under all circumstances to the end of life, it would seem that we are entitled to conclude that they are innate, and, in the individual at least, are not the result of climate or of education, or of any other outward causes.

CRUELTY.

The American Indians, like all other savages, were extremely cruel in the treatment of prisoners captured in war. They took great delight in torturing them, and often burnt them alive. Whether any palliation for these enormities can be derived from the fact that such inflictions produced a less exquisite pain in sufferers of their race than they would have done in ours, we will not undertake to say. At any rate, it is known that prisoners subjected to such treatment bore their tortures with most astonishing fortitude. Sometimes, indeed, such suffering was voluntarily incurred, under the impulse of some exalted sentiment of generosity, or other strong emotion.

THE FATHER DYING FOR HIS SON.

An account is given of an Indian who belonged to a tribe that was involved in some quarrel with a neighboring tribe, and one day when he came home from his hunting he found his wife in a state of extreme anguish and terror from the fact that a party of the enemy had come suddenly upon the wigwam during the absence of the father, and had made a prisoner of the oldest son, and carried him away.

The father immediately bade his wife farewell, and putting himself upon the trail of the hostile party he followed them with the utmost diligence. He knew that the destiny of the poor prisoner was most assuredly to be tortured to death by fire, and he was going to offer himself for this sacrifice, in order to obtain the ransom of his child.

He came up with the party of the enemy just as they were making preparations to enjoy their cruel revenge. He approached them with a signal which was equivalent to a flag of truce in civilized warfare, and offered himself as a substitute for his son. "My poor boy," said he, "is just entering upon life. Do not cut him off so prematurely from the enjoyment of it. He is vigorous and strong, too, and is the hope of his mother, and he will be, for many years, the stay and support of the family. But I am old and infirm. My work will soon be done, and I am of little value to my wife and children. But I am just as good to be burned alive for your revenge as he."

This, or something equivalent to this, the old man said to his savage enemies. They acknowledged the propriety of the proposal, and made the exchange. They unbound the young man and gave him his liberty. The father sent him away, charging him to go home and take care of his

mother and of the children, and then gave himself up to be burnt to death by a process protracted as long as possible, while his enemies feasted and danced around the fire.

THE PRACTICE OF SCALPING.

The practice which prevailed among all the native tribes of North America of taking off the scalps of enemies slain in battle, and preserving them as trophies of victory, has generally been considered a special token of the barbarous cruelty of the Indian character. The practice, it is true, presents a most shocking image to our imaginations, yet, when we reflect upon it, it does not seem to denote any special and peculiar cruelty. It is barbarous, without doubt, yet still perhaps not specially and peculiarly so.

ORIGIN OF THE PRACTICE.

The practice arose very naturally from the custom that prevails universally among all hunting savages, and indeed among all hunting men, whether savage or civilized, of obtaining from the body of the animal slain something to be preserved as a trophy of the prowess of the hunter in killing him. A barbarous hunter wears the trophies thus obtained upon his person. A civilized one hangs

them up in his hall. That seems to be the chief difference between barbarism and civilization in this respect.

The Indians made their dresses of the skins of animals that they had killed; and the fiercer and more furious the beast that furnished the material, the more distinguished and glorious was the attire.

There were many parts of the bodies of these animals that were used in this way. Skins were made into quivers, moccasins, leggins and robes. Horns were used in head-dresses; bones were worked into beads and ornaments of every kind; and long hair, dyed of various colors, was formed into fringes to decorate the borders of garments. There was a particular species of eagle called the war-eagle, on account of his strength and fierceness, whose feathers were prized above all others for purposes of dress and decoration.

From this practice of taking the skin, the horns, the hair, or the feathers of animals slain in the chase as trophies to be used as articles of dress or ornament, it is but a single step to that of preserving a portion of the long hair of an enemy slain in battle for the same purpose; and when the man was dead there was no special cruelty in taking a portion of the skin with the hair. Not that we are to suppose that the Indians could have any feeling

that would lead them to defer taking a scalp till after death from motives of humanity, but only that in ordinary cases they would be compelled to do so. It would, of course, be very seldom that a scalp could be taken from a victim while he was alive.

CUSTOMS CONNECTED WITH THE PRACTICE OF SCALPING.

The portion of the skin which was taken from the head in scalping an enemy was quite small, only a few inches in diameter. All that was essential was that it should include the crown of the head—that is, the central point from which the hair separates. The hair itself, however, which grew from the other parts of the head was usually cut off too, especially if it was long, and suitable to be worked into fringes and other such ornaments.

A scalp, when taken from the head, was first stretched in a sort of hoop to keep the skin distended while drying. This hoop was formed upon the end of a long pole by bending the end round into a circle, first cutting away a portion of the wood at the end to make it sufficiently flexible. The scalp was placed in the center of this hoop, and fastened there by strings passing out in every direction to the circumference—the long hair hanging down the pole. The pole served, of

course, for a handle by which the trophy could be borne in a conspicuous and triumphant manner.

There were certain ceremonies to be performed with the fresh scalps as soon as the party taking them had reached home, by way of public recognition of them as warlike trophies. These ceremonies consisted of feastings and rejoicings, accompanied with songs and dances—that is, if such wailing and unearthly succession of sounds as they made could be called songs, or their horrid contortions and gesticulation dances. When these ceremonies were completed the scalps were considered as duly consecrated, and were thenceforth preserved with great care in the wigwam, or worn upon the person, as badges of the highest distinction and honor.

TREATMENT OF WOMEN.

The Indians have been accused of treating their women as slaves, and there is no doubt that the women were always held by them in a state of very complete and absolute subordination to the men. They were employed all the time in arduous labors, but this was a matter of necessity, for the continual toil of both men and women was in most cases necessary for the maintenance of the family. The woman had the house to put up and take

down, the mats and clothing to make, fuel to bring for the fire, and the field to till.

But all this probably made no more than her fair proportion of toil and exposure, when we consider the sufferings and danger and fatigue which fell to the lot of the husband in his hunting and fishing expeditions. The privations which the men sometimes endured in their long tramps through the forests, especially amid the snows and storms and intense cold which reigned in all the northern forests for so large a portion of the year, were indescribably great, especially since the indomitable pride of the hunter often prevented his returning home, however urgent his own personal necessities might be, without having first obtained his game. Instances have been known of the Indians wandering in the woods until they have become perfectly exhausted, and of their then lying down and perishing with hunger, rather than go home to a starving family, without the means of supplying them with food.

POLYGAMY.

Polygamy prevailed to some extent among the Indian tribes. Of course, since the number of the sexes is everywhere so nearly equal, this practice can never be carried to any *very great* extent in

any human community, even if there were no natural instincts in the heart to war against it. There was no law among the Indians restricting men to a single wife, and prominent personages, such as great warriors and chieftains, often accordingly possessed themselves of more than one. The motive which influenced them, however, in these cases was not, as it would seem, a sensual one, but rather a desire to extend their influence by connecting themselves with powerful families, and to aggrandize themselves in the estimation of the community by enlarging their domestic establishment. The practice, however, being in violation of the natural instincts of man and the essential laws of his constitution, led generally to domestic disquiet and suffering, and sometimes to catastrophes which would have comported well with the strength of the sentiment of jealousy in the heart of the most civilized woman.

INTELLECTUAL SUPERIORITY OF THE CAUCASIAN RACE.

We are surprised sometimes, it is true, at the ingenuity which the Indians exhibited in some of their inventions, and it is, indeed, in some sense wonderful that with materials and implements so imperfect they could manufacture such efficient weapons and carry out such curious contriv-

ances. But, after all, when we come to compare a bark canoe, perfect as it is in its way, with one of the ocean steam-ships of the Caucasian race, or the best made stone-tipped arrow ever shot at a moose or a buffalo, with the double-barreled rifled carabines carrying an explosive bullet, with which a French hunter lies in wait for an African lion, we learn the immense distance which separates the powers and attainments of the two races from each other. We must remember, too, that the contrivances which we find Indians now using, and which we think so ingenious, are not the inventions of the individuals that we see using them, nor even of the generation now upon the stage. They are the results of the combined ingenuity of a hundred generations! It is somewhat the same, it is true, with our inventions; but with us, not only are the results infinitely greater, but the work is still going on with a steadiness and rapidity of progress almost inconceivable. There is doubtless more real invention exercised, and a greater number of new and ingenious contrivances originated and perfected every single year, in any one of ten thousand machine shops and manufactories now in operation in America, than the Indians can produce as the result of the accumulated efforts of all the genera-

tions of their race, from their earliest arrival upon these shores to the present time.

THE TWO GREAT MEANS OF CIVILIZATION.

But whatever we may think of the intellectual inferiority of the Indian race, the slowness of their progress in the arts of life was not due wholly to that cause. There are two great essential elements without which civilization can never make any rapid progress, or attain to any great height, in any nation. These two elements are iron, and the art of writing. With the possession of iron to make implements and tools, one man, it is found, can produce the food of ten, thus leaving the other four of the half of the community that we may suppose to be able-bodied, to be employed in other occupations. It is in consequence of this release of so large a portion of the community from the labor of procuring food, through the aid afforded by iron, that arts and inventions arise. Whereas, without iron, it requires *five* men to produce the food of ten, and the other five consist of the very young, the very old, the sick and the infirm. So that, without iron, nearly the whole available strength of the community is required for the production of food, the surplus that remains being barely sufficient to provide, in the simplest possible

way, for the demands of nature in respect to shelter and clothing.

Again, with the art of writing the progress made in each separate generation is recorded, and thus the goal attained in one age becomes the starting point in the next. It follows from this that a race that possesses the art of writing may be decisively progressive, but one which is without that art can only be so in a very limited degree. In this latter case the greatest part of what any one genius discovers or learns dies with him, and the next genius that arises must commence the work anew. Thus the nation, even if it is always rising, is always sinking back again to where it was before. Nothing but the art of writing, to provide each generation with the means of recording what it has discovered, will enable it to keep its hold and go on continually ascending.

The Indians accordingly, being without this art, made no advance whatever. If they did not even retrograde, they lived from generation to generation the same.

CHAPTER X.

THE COMING OF THE EUROPEANS.

GREAT CHANGES PRODUCED.

THE coming of the Europeans to this country brought new races not only of men, but also of plants and animals, into contact and connection with those previously existing here. The result was that, in the course of two centuries, immense changes were produced in the occupancy of the country, new and higher forms that were introduced from the old world superseding and displacing the inferior and more imperfect ones which before had possession of the new.

CHANGES IN RESPECT TO ANIMAL LIFE.

Some of the more remarkable of these changes are well known. Others equally interesting, in a philosophical point of view, but leading to results less conspicuous, have not attracted so much attention. One very striking case is that of the horse. Certain animals of this species escaped from the

Spaniards in Mexico and Peru—very likely a small number at first. They found the region around them producing plenty of grass, and the climate mild and summer-like through the whole year. Of course, they required no care on the part of man, and began soon to multiply with great rapidity; and now, after the lapse of three hundred years, herds of them cover the prairies and plains of the middle and southern regions of America in countless millions, and, of course, other animals, that before occupied the same grounds and fed upon the same herbage, have been displaced by them and have disappeared.

It is somewhat so with the cow. Wild cattle, originally introduced into the country by colonizing companies from Spain, now throng the South American plains in such numbers that they are hunted and slain by hundreds of thousands every year for the sake of the hides. And still the numbers are increasing.

The bovine races of Europe, however, have not been able to spread in a wild state northwardly into the prairies of North America, on account perhaps of the fact that the buffalo, a superior animal of the same kind—superior in respect to strength and ability to maintain his ground—has possession already. Nor were they or the horses

able, unaided by man, to occupy the northern regions on the Atlantic; for although these regions were well adapted to produce their peculiar food, the winters were too long and cold for such animals to live through them without artificial aid. With this aid, however, they can do it, and thus, under the fostering charge of man, the green meadows and hill-sides, extending over many thousands of square miles between the lakes and the sea, have been covered with flocks of sheep and herds of horses and cows, while the bear and the moose that formerly had possession of them have passed away. A few lingering specimens only remain to roam in solitude within the narrow limits left to them, and to wonder where their companions can have gone.

CHANGES IN RESPECT TO PLANTS.

Changes corresponding to these have taken place on a vast scale in the vegetable kingdom. Multitudes of plants that were introduced into America by the European colonists, either accidentally or by design, have since that time become very widely extended here, and have extirpated or displaced, to a corresponding degree, the original occupants of the soil. These changes have taken place sometimes with and sometimes without the

aid of man. One of the most striking examples of the former class is that of the grasses and the cereal grains, such as wheat and rye, which now cover millions and millions of acres through all the central regions of the continent, where formerly brakes and bullrushes and wild wood-flowers, barren and useless, had complete possession.

It is well that this should be so. Such changes are in fulfillment of the beneficent designs formed by the author of nature for the gradual improvement of the condition of the earth, and the advancement of it, in respect to its occupants, from lower to higher and nobler forms of life.

CHANGES IN THE RACES OF MEN.

A change exactly analogous to these has taken place in respect to man. The aboriginal inhabitants of the country were of races formed with constitutions, both physical and mental, adapting them to obtain their livelihood by fishing and the chase—modes of life by means of which North America might sustain perhaps twenty or thirty millions of inhabitants. The Caucasian race, which was introduced from Europe, is endowed with constitutions adapting them to gain their livelihood by agriculture, commerce, and the manufacturing arts, a mode of life by which the same territory

is capable of supporting *many hundred* millions—we know not how many. Under these circumstances it was as inevitable, and as much in fulfillment of the designs of divine Providence, that the old races should be supplanted by the new, as that the horse and the cow should displace the alligator and the elk, and brakes and bulrushes yield their native grounds to corn.

And such has been the fact. It has been estimated that at the time America was discovered the number of Indians dwelling within the limits of the United States was about sixteen millions. Of the descendants of these sixteen millions only about two millions now remain.

THE DISPLACEMENT OF ONE RACE BY ANOTHER NOT NECESSARILY ATTENDED WITH SUFFERING.

Nor are we to suppose that such a change as this, by which a lower race is supplanted by a higher one, necessarily implies any violence or wrong on the part of the former against the latter, or any special suffering. It is the race and not the individuals that the extirpating process acts upon. That is to say, the effect is produced, not by the destruction of individuals already existing, but by a diminution in the numbers born to take the places of those ceasing to exist by natural causes.

If the various aboriginal races had always been, and still continued to be, treated with the strictest justice and the most sincere and cordial good will, they would have none the less surely fulfilled the universal destiny of the lower to give way before the higher forms, in the great onward march of organization and life; but the change would have come slowly, quietly, and without suffering. Indeed, the very beings subject to it, with the exception of a few far-seeing minds that might discover it by a special and laborious study of the past and of the future, would have been unconscious that it was going on.

DIFFICULTIES THAT OPPOSED THE AMALGAMATION OF THE TWO RACES.

It might at first be supposed that when a superior and an inferior race were brought thus together upon the same territory, a process of amalgamation would have set in, by which, in the end, they would gradually be melted into one; but there are very deep-seated causes operating in all such cases to prevent such a union. In the first place, the mental and physical constitution of the Indian fits him specially for wandering as a hunter through the woods, and gaining his subsistence by the chase, and for no other mode of life.

These qualities are innate and permanent. At least they are beyond the reach of any means of change that can be brought into operation in the course of any moderate number of generations. The whole history of the Indian tribes and of the almost fruitless attempts which have been made to civilize them, and induce them to live like white men, proves this quite conclusively. Missions were established among the Indians of New England for the purpose of instructing them in the arts of European life and in the truths of Christianity, and though for a time very remarkable results were produced, no radical or lasting change was usually effected. As soon as the external support to this new state of things, and in a certain sense unnatural, was withdrawn, everything slowly but irresistibly sank back into its former condition, and the hereditary instincts and propensities of the race returned in all their pristine vigor.

In the same manner the experiment has several times been made of educating Indian young men in the New England colleges, but the pupils thus taught have, almost without exception, when their prescribed course was finished, and they were left at liberty, as they arrived at manhood, to follow the impulses and instincts of their own hearts, very soon turned away from the arts and refinements

of life to which they had thus been ushered, and have gone back into the woods, and relapsed hopelessly into their former condition.

FIXEDNESS OF THE INDIAN TASTES AND HABITS.

There are remnants of many of the ancient tribes existing at the present day in various parts of our country, but they live by themselves, a marked and separate race, with nothing changed except the external circumstances by which they are surrounded. They live in huts still, as their ancestors did three hundred years ago. It is only the covering that is changed—the birch bark, which has failed, being replaced with canvass, or with slabs obtained from the white men. They sit upon the ground around their wigwam fire, just as of old, and are occupied in the same species of employment, only that they make baskets instead of canoes, and bows and arrows to sell as toys, or to be used by children in shooting at coppers for a prize, instead of for the service of hunters in the chase. Even their garments retain in a great measure the forms of the old national costume, though made now of blankets and calico, instead of the skins of beasts, and adorned with glass beads instead of wampum. They come with the wares which they make to sell into the white

man's kitchen, where they are kindly entertained, and where they have every opportunity to observe the conveniences and the comforts which civilization affords, but no kindling desire is awakened in their minds to imitate or share them. Silent, patient, impassible, they witness the advance of

ESSENTIALLY UNCHANGED.

the mighty wave which sweeps on so irresistibly over and around them, apparently without any regret for the past, or any emotion, either of hope or fear, in respect to the future. And thus in the

heart of a country changing and advancing more rapidly than any other, they alone remain, from generation to generation, wholly unchanged.

There are descendants from Indians residing in certain portions of the Southern States that have adopted a settled mode of life, and have attained to a considerable degree of refinement and civilization, but in general, even among these, the degree in which they manifest the capacities of the Caucasian race corresponds very nearly to the proportion of Caucasian blood that flows in their veins.

PRESENT CONDITION OF THE WESTERN TRIBES.

In the interior and western portions of the continent are vast tracts of land which remain almost entirely in possession of Indians; and although the United States government exercises a general jurisdiction over the whole country, still there are extended territories reserved for the exclusive occupancy of the native tribes. Within these reservations the tribes live in their own way, pursuing such modes of life and maintaining such systems of government as they themselves choose. This state of things has continued for more than a century, without any essential change taking place in the Indian habits or character. A very considera-

ble trade has sprung up, it is true, between the natives and the whites, by which, in exchange for skins and furs which they obtain by trapping and the chase, the former procure a great many commodities that are produced by the arts and manufactures of civilized life. But the introduction of these commodities among them does not have the effect of changing their habits or modes of life in any appreciable degree, but rather, by facilitating the supply of their wants and the satisfaction of their desires, to fix and establish these habits more firmly than ever. They obtain from white men horses and guns and blankets, and gaudy trappings and decorations of all kinds. But they use all these things only as means to enable them the better to act their parts as huntsmen and warriors.

THE MANDAN LODGES.

Some of the western tribes avail themselves of their commerce with the whites to procure the means of adding very materially to their domestic comfort, while still not essentially changing the system of life handed down to them from their forefathers. They built lodges of great size, sometimes fifty feet in diameter. The sides are formed, for four or five feet above the ground, of a bank of earth. Above this the walls are continued upward

by a row of very stout poles or stems of trees, which are set close together on the top of the bank and meet in the center above. The roof is thatched with willow boughs and then plastered over with clay, so as to make it perfectly water-proof. In the center of the interior is a fire-place, which consists simply of a shallow depression in the ground. This fire-place can, of course, be approached on every side, and it is for the use in common of all the families that inhabit the lodge.

The space at the circumference of the lodge, extending along the wall, is divided into separate compartments, like the cabins of a ship, for the several families. Sometimes very rich and showy curtains are used to separate these compartments from each other, and the posts which are set up to divide them are hung with arms and armor, and also with scalps, antlers and other trophies.

Each family has a bedstead within its compartment. A buffalo skin stretched over it forms both sacking and bed. Another buffalo skin serves the combined purpose of sheets, blankets and counterpane; while a third, properly folded, fulfills the function of both bolster and pillows.

Some of these Indians carry their luxury, in the matter of dress and decoration, very far. An American traveler once gave fifty dollars for the

head-dress of a western Indian, which he wished to purchase as a specimen of Indian art, to add to his museum.

DIFFERENT CAUSES FOR THE AVERSION OF THE INDIANS TO LIVE LIKE THE WHITES.

Great surprise has often been expressed at the total disinclination always manifested by Indians to imitate the modes of living adopted by the whites, after having once had an opportunity to observe the infinite superiority of them. And although the principal cause may be that they are endowed by the Creator with a mental and physical constitution that adapts them to a different course of life, there are other causes that have been combined with this in producing the effect. Among them one was the repulsion of race—a fixed principle of nature that manifests itself universally throughout all the realms of animal life, and has been ordained, as we shall presently see, for wise and beneficent ends, which prevented them from being cordially received into the same social and domestic system with the whites, and treated by them in it as friends and brothers. A great many curious anecdotes are related in books of Indian history illustrating the position which the poor Indian occupied among the whites, and the feelings

with which he entertained the idea of living with them and becoming one among them.

THE KENNEBEC INDIAN AND HIS CHILD.

Nothing can illustrate in a more touching manner the influence of this feeling than the story of the Kennebec Indian and his dead child. The tribe to which this poor man belonged lived on the banks of the Kennebec, in Maine, and when the State passed into the occupancy of white men, it became nearly or quite extinct. One man of the tribe who still remained, so recommended himself by his good behavior, and by his evident desire to adopt the habits of civilized life, that he received a grant of land from the State, in a certain township, and he settled upon this land with his wife and child, while the other farms in the neighborhood were settled by whites.

The Indian was treated fairly enough by his neighbors in their ordinary dealings with him, but still he was an *Indian* in their view, and they felt no cordial sympathy with him or his family. They did not admit him to any intimate relations with them, or regard him with the kind and friendly feelings which they entertained for each other.

At length his child fell sick and died. The

neighbors did not come to see the family in their distress, and the poor Indian buried his child alone.

Not long afterward he went to some of his neighbors, and said to them in his broken language as follows:

"When white man's child die, Indian man be sorry. He help bury him. When my child die, no one speak to me. I make his grave alone. I can't no live here any longer."

He gave up his farm, dug up the body of his child, and carried it away with him, *two hundred miles* through the woods, to Canada, and joined a tribe of Indians living there, to share with them, for the rest of his days, the hardships and privations of barbarism.

THE FEELING OF REPULSION THAT EXISTS BETWEEN THE DIFFERENT RACES OF MAN NOT NECESSARILY A PREJUDICE.

That peculiar feeling of repulsion which is seen universally in operation between the different races of men, and makes them mutually disinclined to live together in intimate domestic and social relations, is not, as is sometimes supposed, necessarily a prejudice It results, as has already been intimated, from a wise and beneficent law of nature—one in universal operation throughout the whole

animal world—the object of which is to preserve the distinction of species, and to maintain the purity, and secure the advancement, of the higher and nobler races of men. It is an instinctive principle implanted in the nature of every living being which draws him *from* those that are unlike himself in their physical conformation, and *toward* those that resemble him. In species that are entirely distinct from each other the aversion to domestic union is unconquerable. In the case of varieties, like those seen in the different races of men, the repulsive instinct by means of which nature intends to keep them separate from each other, in respect to the propagation of their kind, is less strong, but it is none the less real, and the design with which it has been implanted is beneficent in the highest degree. Thus the amalgamation of the Indian race with the Caucasian race coming to the new world from Europe, would have been against nature, and the instinctive principle, both in the heart of the Indian and of the white man, which leads each to love, and to seek domestic and social union with, those of their own race, and to avoid such union with those of the other, was one wisely implanted in the heart by the great author of nature, and one which both races were accordingly bound to obey.

THE UNIVERSAL BROTHERHOOD OF MAN.

These views, which it would seem impossible to gainsay, do not at all conflict with the sublime doctrine which the Christian religion teaches us, of the universal brotherhood of man, and the obligation which rests upon us all to regard every human being with sentiments of cordial and honest good will. They do not in the least excuse the acts of injustice and cruelty which have been perpetrated so extensively upon the Indian tribes during the last two hundred years, in consequence of which the gradual displacement of the old race by the new, which might have proceeded quietly, peacefully, and without individual suffering, has been hurried onward with so much violence and wrong. Let us hope, however, that the period of this injustice is now over, and that the ancient race, though its days are numbered and are fast passing away, may be cheered in its decline by the kind and friendly regards of those that are to succeed to its heritage, and thus be permitted to spend the remainder of its old age in happiness and peace.

THE END.

COLUMBUS AND HIS MUTINOUS MEN.

AMERICAN HISTORY

by

Jacob Abbott.

ILLUSTRATED
WITH NUMEROUS MAPS AND ENGRAVINGS.

Vol. II.
DISCOVERY of AMERICA.

New York:
Thomas Y. Crowell & Co.
13 Astor Place.

ABBOTT'S AMERICAN HISTORIES.

I.—*ABORIGINAL AMERICA.*

II.—*DISCOVERY OF AMERICA.*

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Entered according to Act of Congress, in the year 1860, by

JACOB ABBOTT,

In the Clerk's Office of the District Court of the United States, for the Southern District of New York.

PREFACE.

It is the design of this work to narrate, in a clear, simple, and intelligible manner, the leading events connected with the history of our country, from the earliest periods, down, as nearly as practicable, to the present time. The several volumes will be illustrated with all necessary maps and with numerous engravings, and the work is intended to comprise, in a distinct and connected narrative, all that it is essential for the general reader to understand in respect to the subject of it, while for those who have time for more extended studies, it may serve as an introduction to other and more copious sources of information.

The author hopes also that the work may be found useful to the young, in awakening in their minds an interest in the history of their country,

and a desire for further instruction in respect to it. While it is doubtless true that such a subject can be really grasped only by minds in some degree mature, still the author believes that many young persons, especially such as are intelligent and thoughtful in disposition and character, may derive both entertainment and instruction from a perusal of these pages.

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DISCOVERY OF AMERICA.

CHAPTER I.

GREENLAND.

A CONNECTING LINK BETWEEN THE OLD WORLD AND THE NEW.

THE great connecting link between the old world and the new, not only in respect to the transmission of plants and animals, but also for man, has always been found in the cold and barren but still magnificent promontory of Greenland. This promontory insinuates itself like a wedge between the island of Iceland, the Feroe Islands, and the coast of Norway, on the one side, and the American shores on the other, and in connection with them forms a series of stepping-stones, or rather of stations, by means of which countless thousands of bears, seals, walruses, foxes, dogs, and other Arctic mammals, and countless millions of gulls, geese, auks, and other far-flying aquatic birds, some through the water, others through the air, and others upon vast fields of ice, either fixed or

moving, have been continually passing to and fro. There are scarcely any coasts in the world more teeming with animal life than these sterile and ice-bound shores.

THE MEDUSAE.

Almost all these animals are beasts and birds of prey, and they derive their sustenance mainly from the sea—the land furnishing very scanty means of supporting life. The ultimate source from which the food of all the Arctic animals comes, and which from its abundance is the cause of the extreme prolificness of life in all those regions, is derived from the vast numbers of *medusae* with which the seas in those latitudes are filled.

The medusae are jelly fishes. There is a very large class of these animals, known to naturalists by the name of Acalephae. This is a Greek word, meaning *nettles*. This name is given to the class from the fact that some of the species have the power of producing a stinging sensation on being touched in the water, or held in the hand. These stinging species are common upon our coasts, and the boys often encounter them in bathing. They call them sea-nettles, sting-galls, and by other

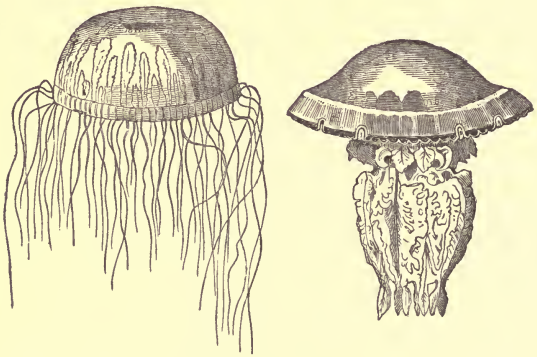
such names. The whole class of Medusae are called by sailors jelly-fishes, or sea-blubber.

These animals have a very singular appearance when swimming in the water. The different species are of various forms and of all sizes, but they all seem to consist of a transparent jelly, of a symmetrical and curious form, but without limbs or members, and they move through the water by a series of alternate contractions and expansions, by means of which they make a certain degree of progress, though in the main they are drifted to and fro wherever the tides and currents bear them.

The substance of which they are composed, as has already been said, consists of a transparent jelly, but it is sometimes adorned with curious and beautiful tints of color, and certain lines are seen in some cases ramifying through it, forming a net-work of a very geometrical character, and denoting the complete organization of the mass.

Some of the species have a sort of fringe of hairs, like little snakes, which hang from the margin of the cup-shaped disc that is formed by their bodies, and float writhing and twisting in the water, as the cup, by alternate expansions and contractions, forces its way along. It is from this circumstance that they have received their name of Medusae—Medusa having been a fabled mon-

ster of ancient times, whose head was adorned with snakes instead of hair.



SPECIMENS OF MEDUSAE.

Many of the medusae are phosphorescent, and these luminous species are sometimes so numerous that the whole surface of the ocean glows with them at night, as if the waves were undulations of liquid fire.

The different species vary extremely, both in form and in size. Some are so minute as not to be seen by the naked eye, in consequence of which it often happens that curious persons, seeing some evening the whole surface of the sea glowing with the light which they produce, are surprised to find

nothing visible in the water, when they draw up a bucket full of it to the deck of the ship, in order to ascertain the cause.

Others of the medusae are of great size and strength. They will seize and devour fishes of considerable magnitude, and yet their bodies contain so little substance that when drawn up upon the beach they look like a mere mass of jelly, and on being exposed for a short time to the sun and air almost entirely dry up and disappear, leaving nothing behind them but a thin filmy web, wholly shapeless and unmeaning.

For some reason or other animals of this class swarm in countless millions in all the northern seas. So dense are the schools sometimes that the whole color of the sea, for hundreds of miles, is changed by them. They furnish, of course, immense quantities of food for whales and other cetaceous animals, and also for fishes of all kinds, which in their turn give sustenance to bears, seals, walruses, and multitudes of other animals. All these animals are provided with warm coats, either of fur for the land or of blubber for the water, to enable them to endure the intense cold of the dreary region which thus furnishes them with such exhaustless supplies of food.

NEITHER DAY NOR NIGHT.

In these polar regions there is, strictly speaking, neither day nor night, but only mornings and evenings, as it were, for the sun never rises higher than a few degrees above the horizon, nor sinks more than a few degrees below. It is, therefore, never very dark at any period of the day or of the year. On the shores of Baffin's Bay it has been found, in the experience of ships wintering there, that in mid-winter, and at the part of the day when the sun is furthest below the horizon, the twilight is so bright that the finest print can be read by it.

Of course, the brightness of this midnight twilight varies with the latitude. The further north we go, and the less the altitude which the sun attains in rising above the horizon, the less is his depression when he sinks below it. Thus, by a beautiful compensation, what would otherwise be the intolerable gloom of a so long protracted period of darkness and cold is greatly diminished.

In addition to this perpetual twilight the motions of the electric currents, and the extraordinary play of mists and vapors in the air, give rise to halos, parhelions, luminous meteors and corruscations of the aurora borealis in great abundance, by

which the aspect of the sky, during the long period of the absence of the sun, is greatly enlivened and cheered.

ICE PRODUCED UPON THE LAND.

The great means of intercommunication between the different coasts and islands of these northern seas is the ice. This ice is of two different kinds—that which is formed upon the land and that which is formed upon the sea.

Upon the land the rains and snows of a vast succession of seasons accumulate, and form beds of solid ice called glaciers, which increase until they become not unfrequently thousands of feet in thickness. These glaciers fill the valleys, and sometimes occupy immense slopes of land declining toward the sea. They are formed wherever there is a tract so situated, in respect to higher land surrounding it, that it can retain the snow that is driven into it by the winds, or that slides into it in avalanches, and also receive the water of the summer streams. The effect of time and cold is to cement all these supplies—rain, snow, sleet and hail—into one solid mass of homogeneous ice, which, however, is nevertheless, notwithstanding its solidity, subject to a slow motion like that of lava nearly cooled, which, though men can travel over

it in safety, and it will bear very heavy weights upon its surface, still moves slowly, and indeed almost imperceptibly, onward.

The motion of the ice in glaciers is exceedingly slow—so slow that, notwithstanding the creaking and grinding sounds which are continually heard upon it, and the constant protrusion of its lower end through the soil, and even into the forests of the lower valleys, it was a long time before mankind could be convinced of the reality of it. It is now, however, not only positively known that it moves, but the rate of its progress has been exactly measured. In Switzerland, the average flow is about an inch an hour in the summer season. As, however, the motion varies very much according to the temperature of the air, in Greenland it must be much slower. It is well for voyagers passing to and fro across the Atlantic Ocean that it is so.

FORMATION OF ICEBERGS.

Whenever a glacier like those above described abuts upon the sea, the slow motion of the mass above and behind crowds the termination of it out over the water, until undermined by the waves, and borne down by the superincumbent weight, immense masses break off and fall over and are borne away by the currents and tides. The fall

FORMATION OF ICEBERGS.

of one of these mountains produces, in the stillness of the Arctic night, a sound like that of thunder, and the vast undulation of the sea occasioned by the fall rocks the ships of whalemen or of explorers at a distance of many miles in the offing.

It is thus that the icebergs are formed, which add so much to the danger of crossing the Atlantic, and which probably explain the mystery in which is involved the fate of the large number of vessels that, after leaving the land in safety, are never heard of again.

These icebergs, however, so dangerous to navigators on the open sea, are the friends and protectors of ships exploring the Arctic shores, affording them, as they so often do, a sure and efficient shelter from fields and packs of ice which come sweeping over the sea with a slow but inconceivably destructive force, that nothing but a rock or an iceberg can withstand.

ICE FORMED UPON THE SEA.

The ice that is formed upon the sea is flat and level and comparatively thin. It is seldom more than from ten to fifteen feet in thickness. It drifts to and fro through the Arctic seas wherever the winds and the currents bear it, moving always with immense force, sometimes in vast and contin-

uous fields, sometimes in broken packs wedged together and piled up in lofty heaps, and sometimes in detached and scattered floes. It carries with it stones, drift wood, and animals of various kinds. The drift wood it collects for itself from the supplies brought by the currents of the ocean from more southern climates. The stones fall upon it from the icebergs. Animals travel over it when it is fast to the shore, and then, when the tide or the wind or the set of the current breaks it up, they are taken with it and borne away.

CURRENTS IN THE NORTHERN SEAS.

In other parts of the world the movements of the ocean in the flow of tides and currents are silent and unseen, but in the Arctic seas the presence of the ice makes them all manifest to the senses of the observer in the most imposing manner. The majestic march of the immense floes, as they are seen sometimes, grinding their resistless way along a rocky shore, sometimes struggling against each other in a conflict continued for many hours, and piling up immense heaps of broken ice along the line of collision for many miles ; sometimes crowding through narrow passages, and then again sweeping down in an immense stream, hundreds of leagues in length, toward the open sea, pre-

sents one of the grandest spectacles which nature anywhere affords, and the solemn sounds emitted by those stupendous movements, in the stillness of an Arctic night, strike all who witness them with an indescribable awe.

The movements to and fro of these immense masses of ice, when free, and the bridging of the waters which they effect when fixed, have exercised a great influence upon the distribution of plants and animals in America, and may have been the first means of introducing man.

THE FIRST RECORDED MIGRATION TO AMERICA.

The first case, however, which is historically recorded of a passage to Greenland from the European shores was that of a man driven across in a vessel by a storm. The name of this adventurer was Gunbiorn. He lived in Iceland, and was blown off from that island by a gale of wind, and after visiting the shores of Greenland, and finding them inhabited by men—who must, of course, have preceded him ages before, but who had left no record of their migration—succeeded in finding his way back to Iceland again. This took place in the year 910, which was something like fifty years after Iceland itself was first discovered and settled by the Norwegians and Danes.

THE NORTHERN SEAS.

There was nothing, after all, very surprising in this voyage of Gunbiorn, for the distance from Iceland to Greenland was not so great as it was from Iceland to the European shores, so that the Danes and Norwegians in colonizing that island had already made more than half the voyage.

Besides, these Northmen, as they were called, were as bold and adventurous sailors as the world has ever seen. Considering how few of the facilities which are enjoyed at the present day were at their command, they accomplished expeditions as hazardous and extraordinary as any of their successors have undertaken to the present day.

ESTABLISHMENT OF THE DANISH COLONY.

It will be seen, by reference to the map, that in making the voyage from Iceland to Greenland the direction in which Gunbiorn must have been driven by the gale was toward the southward. We are apt to have a wrong impression in respect to the relative situation of these coasts, on account of their coming in different hemispheres in the maps which we are accustomed to see. To remedy this the map here given has been constructed on a plan to represent this region of the earth's surface more as it appears upon the globe, and it shows very clearly that in going toward the southern part of Greenland an Iceland navigator was advancing to the southward, and of course to warmer regions, while yet, at the same time, he was going further away from the European shores, from which he and his ancestors had originally come.

Gunbiorn carried back a favorable report of the

land that he had discovered, though it was not favorable enough to induce any of his fellow-countrymen to attempt to visit it for many years. But at length, in 983, a certain chief named Eric Raude, having killed another chief in a quarrel, was compelled to fly from the country by sea, and he went to Greenland. After being absent for some time he returned, and brought back very glowing accounts of the beauty and fertility of the land. Indeed, the name Greenland, which it now received for the first time, was given to it by Eric in token of its extraordinary verdure. His accounts were greatly exaggerated, no doubt, although as they were, of course, intended to describe the condition and character of the country in comparison with those of Iceland, which lay so much to the northward of it, his descriptions were probably not so extravagant as they might seem.

In consequence of his reports and of the efforts which he made to induce the Danish authorities to act upon them, a large expedition was fitted out with a view of proceeding to Greenland to make a settlement there. The expedition consisted of twenty-five vessels. These vessels contained a large number of settlers for the new colony, both men and women, and also cattle, and supplies of seeds and utensils of all sorts necessary for such a community.

About one half of these vessels reached their destination. The rest were scattered by storms, or wrecked among the fields of ice and lost.

Those that landed established friendly relations with the natives whom they found already there, and formed two settlements, which continued to thrive for some time. Numbers came to join these settlements from Iceland, and also from the Orkney Islands, and from the coast of Norway. When we reflect upon the discomfort and the danger which must have attended such voyages as these, made in small and frail vessels, and directed across the most stormy and ice-infested seas, and with no guidance for the navigator but the sun and stars—for the mariner's compass was not known for some centuries after this time—and consider, moreover, the dreadful hardships which the colonists must inevitably have suffered in founding settlements in so wintry and inhospitable a land, we can not but be amazed at the courage and fortitude which they displayed. It would seem that the dauntless energy evinced by our forefathers in the settlements which they made on the Atlantic coast, five or six centuries later, is more renowned only because they have left a more numerous progeny to talk about and applaud them.

DISASTERS.

Three great disasters befell the colony in Greenland before it had been many years established. First, the settlers became involved in wars with the Esquimaux, and they suffered a great deal from this source. In the second place, a great pestilence, called the black death, which broke out and raged with great fury in all the northern countries of Europe about this time, extended itself at last to Iceland, and thence to Greenland, and carried off great numbers of the people. Finally, as if to complete and seal the ruin of the colony, a series of severe winters set in, in consequence of which the ice accumulated to such an extent in the neighboring seas that all access to the coasts of Greenland was cut off, and the poor imprisoned exiles were left to struggle as they could, alone, with the terrible elements of destruction which were reigning so gloomily around them.

When, at length, after the lapse of many years, the ice so far released its hold as to allow a Danish ship once more to approach the land, very few traces of the old colony were to be found.

VOYAGE OF LIEF AND BIORN.

Very soon after the establishment of the colony in Greenland, and before the calamities above men-

tioned came to blast the hopes of the settlers, two of them, named Lief and Biorn, made a voyage to the southward, and explored a considerable portion of the American coast. Lief was the son of the principal founder of the colony, and he was induced to make this voyage from the report of an Icelander, who, on attempting to come to Greenland in a vessel, was blown off in a storm far to the southward. He succeeded finally in working his way back again, and on arriving in Greenland he reported that he had seen a country to the southward that was well covered with wood. Accordingly the governor's son determined to make a voyage in that direction, to see what he could find.

It was early in the summer when the vessel sailed, and the party did not return until the next season. The account which they gave of their adventures was this:

They went to the southward for some distance, and at length came to a large rocky island. They named this island Helluland. After this they came to a low country well covered with wood, which they named Markland. They still went on, and at length, some days later, they discovered a larger and far more attractive country than any they had yet seen. There was a river and trees

loaded with fruit growing on the banks of it. They also found some vines growing in the woods, which certain Germans, whom they had with them on board among the sailors, told them were the same as those which bore grapes in their country, from which wine was made.

This last circumstance interested the party of discoverers very much, for the Icelanders seem never to have seen grapes before. They accordingly named this country Vineland.

They found natives in this country, but they were of very small stature, like the Esquimaux, who are so short that the Icelanders had given them a name which in their country signified dwarfs. They called these natives dwarfs too. They found them in possession of furs and skins, which they were ready to sell for such articles as the voyagers had on board their ship. The voyagers being much pleased with the country, and finding too, perhaps, that the season was too far spent to make it safe for them to attempt to make their way back through the ice to Greenland, landed and spent the winter there, and then in the following summer returned.

DIFFERENT OPINIONS IN RESPECT TO THESE DISCOVERIES.

These voyagers had no means of making obser-

vations for latitude and longitude, so as to ascertain precisely how far south it was that they had found the fertile land. They, however, reported that the time during which the sun remained above the horizon, in the shortest day in winter, was nine hours.

In all the northern regions through which these Arctic wanderers had been accustomed to roam, the time during which the sun remains above the horizon, in the shortest day of winter, was the mark and measure of the latitude and climate of every country, and indeed almost of its whole condition in respect to fitness for the habitation of man.

It is now known that the latitude which gives nine hours for the shortest day in winter is that of Rhode Island; and consequently, if the report of these voyagers is true, it must have been somewhere in the region of Narraganset bay that their Vineland was situated. It is not at all improbable, however, that they exaggerated somewhat the length of their shortest day, and if so, their position would have been further north. Some persons have supposed, indeed, that the whole story is a fiction, or that at most it is an exaggerated account of some small expedition to the western or southwestern shores of Baffin's Bay, and that

Columbus was really the first person of direct European extraction that set his foot upon the shores of the American continent. But the opinion of those best qualified to judge is, that this voyage of the Northmen was really made, and that notwithstanding the renown to which Columbus is justly entitled for his subsequent discoveries, the Atlantic coast of America was really visited by European adventurers many centuries before his day.

THE RUNIC INSCRIPTION.

A great deal of interest was excited in 1824 by the discovery of a singular stone, far up the coast of Greenland containing an inscription in *Runic* characters. This name Runic was applied to an alphabet of sixteen letters, of very singular forms, which were in use in ancient times among all the Scandinavian nations—that is, the people of Sweden and Norway, and of other neighboring countries. The character was used sometimes for public inscriptions, but it was more generally employed by priests and conjurers, for charms and spells, and mystical and magical devices of all sorts. Words of strange and hidden meaning were written in it, within figures of various forms, such as circles, triangles, squares, and the like, and there were different ways of writing, according as

the spell was intended to take effect in securing health to its possessor, or good luck in his business, or safety at sea, or victory over his enemies, or to bewitch and destroy the objects of his hate.

The Runic writing is very ancient, and the use of it was entirely discontinued in the fifteenth century—it having then been everywhere prohibited by law. Many inscriptions, however, in this character still remain in Norway, Iceland, and Sweden. They are made usually upon rude tablets of stone, set up over a cairn, or upon some huge rock or face of a precipice by the wayside.

The Runic inscription found in Greenland was discovered in 1824. The place where it was found was far to the north of the supposed situation of the early Norwegian colonies, and not many miles from the present Danish settlement of Upernavick, in latitude 73°.

The stone was taken to Copenhagen and deciphered there by the antiquarians and scholars. The inscription was found to be as follows:

"Erling, son of Sigvat and Enride Oddsœn, cleared this place and raised this cairn, on Friday after Rogation day, in . . . . . "*

* Rogation is a festival of the church which occurs early in the season, usually in May. It commemorates the Ascension of our Saviour.

The date was indistinct. It was thought, however, that the stone must have been erected not far from the year 1100.

This stone, showing how far up the shores of Baffin's Bay the Northmen had extended their settlements at this very early age, is now preserved as a great curiosity in the royal museum in Copenhagen.

CHAPTER II.

COLUMBUS.

ADVENTUROUS SPIRIT OF THE FIFTEENTH CENTURY.

At the beginning of the fifteenth century only about one-half the globe was known at all to the civilized nations of Europe. There then arose a great desire to explore and discover the remainder.

The nation which took the lead in this spirit of adventure and discovery was Portugal. The government of Portugal had been engaged during the preceding century in several wars with the Moors, in the course of which they had fitted out a number of naval expeditions to the coast of Africa. In prosecuting these wars the Portuguese made great improvements in the art of building ships and of navigating them. The situation of their own country, too—with numerous safe and excellent harbors along the coast opening out directly upon the broad Atlantic—was very favorable.

Previous to the time above mentioned the navigation of the world had been almost wholly confined to the Mediterranean sea, and the great cities

that were situated on the shores of that sea, such as Genoa, Naples, Venice, and others, conducted nearly all the commerce that then existed. The merchants sent their goods by ships to every part of the Mediterranean, and from the eastern shores of that sea they sent them by caravans to Persia, and finally to India.

DESIRE FOR A PASSAGE TO INDIA BY SEA.

The way to India overland, by caravans, was extremely long and tedious, and yet the trade was so profitable, and the accounts brought back by the merchants and travelers, in respect to the inexhaustible wealth of the country, were so exciting, that the European governments, especially those that ruled over kingdoms situated near the western confines of the continent, began to be extremely desirous of finding some way of reaching it by sea. A single good-sized ship, even such as were built in those days, would convey as many goods as a train of a *thousand* camels could carry, and would advance, moreover, at twice or three times the camel's rate of speed. There was also an enormous difference in the expense of land and sea transportation. Twenty or thirty men, who could take all their provisions with them, would be sufficient for conducting the ship; while a caravan of

camels, sufficient to convey by land the cargo of goods which the ship would contain, would require quite an army of drivers, packers, guides, soldiers for escort, and the like; and the provision necessary for the sustenance of this great troop would necessarily have to be purchased mainly along the line of the route, and often at very high prices.

It is not at all surprising, therefore, that the merchants in the western part of Europe became at length extremely desirous of finding a passage to India by sea.

TWO ROUTES TO BE TRIED.

There were two routes by which an attempt might be made to reach India by sea. One was by following the coast of Africa, with a view of sailing entirely round the southern extremity of it, and then turning to the eastward and so proceeding to India. This way was at length discovered, and it is now the great route pursued by the East Indiamen of all the countries in Europe. These ships supply the whole western world with teas, silks, spices, and other East India productions, while they carry thither, in exchange, the merchandise and manufactures of Europe, transporting cargoes which all the camels in the world could never succeed in carrying overland across the plains.

Well known, however, as this great thoroughfare is at the present time, there was only a conjecture that it might exist in those early days; for the ships of the Europeans had only proceeded a very short distance down the African coast, to a certain cape called Cape Non, and nobody knew at all what was beyond this boundary.

The other route by which it was thought that a passage to India by sea might possibly be found will be mentioned further on.

PRINCE HENRY OF PORTUGAL.

Among the personages who took the greatest interest in the voyages of exploration and discovery made in those days was Prince Henry, the fourth son of John I., King of Portugal. By reference to the chart at the commencement of the next chapter it will be seen that Cape St. Vincent is the southwestern extremity of Portugal. It is a lofty promontory overlooking the sea. Near it is the small seaport of Sagres. Prince Henry made some voyages to Africa in connection with his father's expeditions to that country, and he became so much interested in navigation and in the sea that he left the court at Lisbon and took up his residence near the port of Sagres, on the high land, whence he could look off at all times over the

ocean which he so much loved, and where, too, in the little port below he could fit out his ships and plan and arrange his nautical enterprises. In the end he devoted his life to organizing and sending forth expeditions of discovery. Most of these expeditions were sent down the coast of Africa with a view of reaching the southernmost extremity of the continent, and there finding an open way through the sea to India.

The mariner's compass was not yet known, and so the ships, in making these voyages, were compelled to keep near the shore, and to advance in a very slow and cautious manner. Sometimes, however, the winds and the waves helped them to a sudden and rapid stride in their progress of discovery, though perhaps much against their will. The very first ship, for instance, that Prince Henry sent out, was driven off from the coast by a squall, and after scudding over the waves for three or four hundred miles the mariners came in sight of an island, where they obtained refuge from the gale. They named the island Porto Santo, and then returned home to report what they had discovered.

A colony was sent out to take possession of this island, and while they were making their settlement they saw far to the southward of them a small spot in the horizon. It was the summit of

another island. They sailed to it and found the island of Madeira, which was a very much greater prize than the one which they had first discovered.

These successes, when they were reported to Prince Henry, encouraged him very much, and in fact awakened a great enthusiasm throughout the whole of western Europe. Nothing was talked of or thought of but voyages for exploring unknown seas. Adventurous nobles and grandees began to form schemes for becoming governors of islands which they were to discover. Merchants formed companies, and sea captains studied maps and charts, and advanced innumerable theories and conjectures in respect to the conformation of the land and sea, and the direction in which new territories might be expected to be found.

DISCOVERY OF THE PASSAGE ROUND THE CAPE OF GOOD HOPE.

This state of things continued for a long period, during which every successive voyage was extended further and further south, and yet so slow was the progress made that it was more than fifty years before the Portuguese navigators reached the Cape of Good Hope. As they went on making voyage after voyage, each one extending a little further to the southward than the preceding, they were con-

tinually more and more surprised at the immense extent of the continent whose shores they were exploring. The line of coast seemed to stretch on interminably before them. Each new cape which they reached they hoped would be the last; but as soon as they had doubled it, and opened the view beyond, they always saw another bringing its dim outline into view, in the haze of the distant horizon, to mock and disappoint them.

At length, when a voyager came in sight of the real termination of the land, he found a lofty promontory, around which the winds and storms were raging with such violence that he did not dare to proceed. So he named the point the Cape of Storms, and returned. The king, however, to whom he reported the result of his voyage—for this was after Prince Henry's day—said that he believed, or at least hoped, that this promontory was the last. So he named it the Cape of Good Hope, and as the hopes which it thus awakened proved afterward to be well founded, the cape has retained the name which was thus given to it to the present day.

IDEAS OF CHRISTOPHER COLUMBUS.

Christopher Columbus was one of the navigators who was attracted to the western part of Europe

by the interest which was everywhere felt in the Portuguese expeditions. He was born in Genoa. Indeed, all the best sailors in those days came from the great Italian sea-ports. Columbus was a thoughtful, serious-minded man, of very calm and quiet demeanor, but endued with a spirit of indomitable energy and perseverance. He made various voyages in the early part of his life, of the particulars of which not much is known. But wherever he went his mind was intent upon obtaining information in every possible way in respect to the form of the earth, to the question whether there might be other lands in existence yet unknown, and if so, in what direction they were to be sought, and also more especially in respect to the possibility of finding a way to India by steering due west from Europe, and so entirely circumnavigating the globe.

Columbus had arrived at middle age before he began seriously to think of making voyages of discovery; and while he was at Lisbon, making endeavors to awaken an interest in the subject there, he formed the acquaintance of a young lady, whom he first saw at a convent chapel where he was accustomed to attend divine service. He was soon afterward married to this lady. Her name was Philippa Palestrello. Her father had been a dis-

tinguished navigator, but was not now living. His widow, the mother of Columbus' bride, related to Columbus a great many of her husband's adven-

COLUMBUS AT HIS STUDIES.

tures in his different voyages, as he had related them to her, and communicated to him a great deal of information, which was of much advantage to him. She also produced and delivered to Co-

lumbus her husband's maps, charts, and journals, all of which she had carefully preserved, and which Columbus now studied with great interest and attention.

SUPPOSED MAGNITUDE OF THE EARTH.

One of the first questions to be determined in respect to the possibility of reaching India by sailing directly round the globe was what the distance would be, and that, of course, would depend upon the magnitude of the earth. Since the days of Columbus the circumference of the earth has been very accurately measured in both directions, but the means of determining the question which he could command were very imperfect and few.

He made his calculation, as indeed all calculations of longitude are made at the present day, by *time*. The sun he knew was twenty-four hours in passing round the world. So he imagined the equator to be divided into twenty-four parts, one for each hour. He calculated that from the furthest known portion of Asia to the longitude of the Cape Verd Islands, which was the furthest point to the westward that the European navigation had yet attained, there were comprised sixteen of these hours, leaving only eight to be explored.

Now, the distance from the Cape Verd Islands to the furthest portion of Asia then known to Europeans was about eight thousand miles, and if this distance had really represented sixteen out of the twenty-four hours of time comprised in the circuit of the earth, then the remaining space, which would have represented eight hours, would have made only four thousand miles. Columbus supposed that even this distance would be very much diminished by the extension of Asia to the eastward much further than the point which European travelers had yet reached. So that he thought by sailing west from Europe he should reach the land long before he should have passed over the whole interval. He *might* come to it after sailing *three*, or even *two*, thousand miles.

But the truth was, the earth was very much larger than he supposed it to be. So that instead of reaching India by a voyage of two thousand miles, the distance, by the way that he proposed to go, was nearer *sixteen* thousand.

Then, moreover, it was impossible to reach India by such a route at all, for the continent of America lay directly in the way. And so it happened in the end that, on making his voyage, after he had proceeded about as far as he expected to go before coming to India, he was stopped by the

American shores, while he was still *ten thousand* miles from his intended destination.

DIFFICULTIES ENCOUNTERED BY COLUMBUS.

Columbus met with a great many difficulties and discouragements before he could obtain the means of carrying his plans into effect. Very few private individuals were wealthy and powerful enough to furnish vessels and men for such an undertaking, and the governments to whom he applied were very slow in coming to a decision; and in repeated instances, when they did decide, their answer was unfavorable. It is said that the king of Portugal was strongly inclined to favor his views, but the great geographers and learned men of his court, to whom the project was referred for examination, pronounced against it so decidedly that the king had not courage to proceed.

Other governments, after long delays, decided, one after another, against the plan. At last, Queen Isabella of Spain, who reigned in conjunction with her husband Ferdinand, was induced to look favorably upon the undertaking, but a long delay took place, and many difficulties intervened, before an arrangement was finally made.

Some of these difficulties arose from the very grandeur of the views which Columbus entertained

and the high personal expectations which he cherished. He was a man of great exaltation of character, and in revolving in his mind the subject of a new route to India, and of the discovery of new islands and continents beyond the sea, he had been led to form very lofty ideas of the mission which Divine Providence designed him to fulfill. He was about to open the way to many new heathen nations and tribes which would be converted to Christianity by the light which his coming would cause to shine upon them, and he was going to bring home untold treasures of wealth, which Isabella was to employ in a new crusade against the Turks, for the recovery of the Holy City. His conceptions, moreover, of the importance of his own personal agency in these grand achievements were such that he demanded to be invested, in advance, with the authority of admiral and viceroy over all the seas and lands that he should discover.

The idea of investing a private person like Columbus with the rank and title of viceroy was extremely distasteful both to Isabella and to all the Spanish court, composed as it was of grandees as proud of their aristocratic birth as any nobles in Europe, and it was a long time before this difficulty could be surmounted.

Columbus was, however, firm in insisting on

these conditions, though quiet and calm in his manner of doing so, and at length the grandees yielded.

TERMS OF THE COVENANT.

Ferdinand and Isabella made a solemn covenant or treaty with Columbus, which was signed and sealed in due form. This covenant stipulated—

1. That Columbus was by the act constituted Lord High Admiral, with full maritime jurisdiction over all the bays, gulfs, coasts, and shores that he should explore.

2. That he was constituted viceroy for the king and queen over all the lands and continents that he should discover; and this dignity was to be hereditary in his family. All separate and subordinate governors of particular provinces were to be appointed by the king and queen from a limited number of candidates that Columbus was to name.

3. Columbus was made supreme judge, in respect to all matters pertaining to commerce and commercial transactions of all kinds, in the new countries.

4. He was to receive for himself and his heirs, forever, one-tenth of all the clear profits which should be derived from the productions and commerce of the new lands, in consideration of his being the discoverer of them.

5. He was entitled to furnish, if he chose, one-eighth part of the outfit for the expedition, either by himself or by the contributions of his friends, and in consideration of this he was to receive one-eighth part of the profit.

The powers and prerogatives thus conferred upon him were very high. They were all contingent, it is true, on the future discovery of seas and lands upon which they were to take effect; but Columbus was so confident that he should find and explore many rich and extended territories, that he felt, when the treaty was signed, as if he were already raised to the rank of a prince.

In respect to the natives of the countries that were to be discovered, these arrangements were all made without regard to them. They were heathen, and their rights were accordingly not taken into the account at all. The pope, as supreme head of the church, had given the Christian kings of Spain and Portugal full authority to take absolute possession of any countries which they might discover, and to establish their own government over the inhabitants, with a view of bringing them all at once within the pale of Christianity. No one seems to have entertained any idea that the natives themselves could have any rights which were entitled to the least respect or consideration.

PREPARATIONS FOR THE VOYAGE.

The point from which the expedition was to sail, and where, of course, all the preparations were to be made, was a small town in the southern part of Spain, called Huelva, whose port is Palos.

Both Huelva and Palos are situated on the shores of a bay which forms the harbor of Palos.* There are many small islands in this bay. One of these islands named Saltes was the particular rendezvous of the expedition. The government furnished two vessels and ninety men. These vessels were very small, and, incredible as it may seem, had no decks except at the bows and stern. Thus they might almost be considered as open boats, only that they were of the size of small vessels.

Columbus had some friends who resided near Palos, especially the family of Pinzon, which consisted of three brothers, all men of considerable wealth, and accustomed to the sea. These friends combined with Columbus in defraying the expense of furnishing his eighth part of the outfit, on condition that they were to receive a portion of the profits of the enterprise, and it was arranged

* See chart at the commencement of the next chapter.

moreover that two of the brothers Pinzon were to join the expedition as commanders of the vessels furnished by the king. The funds which they contributed were expended in buying a third vessel, larger than either of the other two, and in fitting it up for the voyage in the most complete manner.

This vessel Columbus named the Holy Mary, or, as it was expressed in the Spanish language, the Sancta Maria. The two which were furnished by the government were named the Pinta and the Niña.

The Holy Mary was to bear the admiral's flag, and to be commanded by Columbus himself. Of the next vessel, the Pinta, Martin Pinzon was captain, and his brother Francis pilot. Vincent Pinzon, the other brother, commanded the third vessel.

The banner borne upon the admiral's vessel had for its device two crowns, with the initials of Ferdinand and Isabella over them, and a large cross between them.

The vessels were all furnished with provisions and water for twelve months. The number of men provided by the government to navigate the vessels was ninety. In addition to these quite a number of other persons joined the expedition,

making the whole number about one hundred and twenty. They all felt a certain personal interest in the adventure, for Queen Isabella had offered a large reward to the one who should first discover land, after the vessels had gone beyond the range of all former voyagers, and this prize was open to the competition of the whole company. Still many of the seamen had been compelled to join the expedition against their will.

INSTRUMENTS OF NAVIGATION.

At the present day navigators have the means of finding their place upon the ocean, both in latitude and longitude, very exactly. They take with them the time of the port which they leave, by means of very precise chronometers, and then having nice instruments for ascertaining the time where they are, they can determine how *many hours of the sun's motion* they are from port, and this gives them the longitude.

They have also very exact instruments for ascertaining the sun's altitude at noon, or the altitude of the north star, or of any other known star, when it crosses the meridian, and this gives them the latitude.

The only instrument which Columbus was provided with for measuring altitudes was one called

an astrolabe. It consisted of a circle with a graduated rim, and sights, by means of which he could ascertain, within a few degrees probably, the altitude of the north star. This would give him, approximately, his latitude; for to a person on the equator the north star appears in the horizon, and as the observer moves to the northward over the earth's surface the star rises, until at length, at the pole, could he go so far, the north star would be directly over his head.

Thus the altitude of the north star corresponds approximately with the distance of the observer from the equator toward the pole.

Accordingly, by watching the north star and measuring the altitude of it every night with his astrolabe, a navigator in those days would be able to keep his ship, in advancing toward the west, pretty nearly upon the same parallel of latitude, or to draw to the south, toward the equator, or recede from the equator toward the pole, at his pleasure.

Columbus had the mariner's compass also, and it might at first be supposed that it would be in his power to regulate the course of his ship, in respect to latitude, by this instrument alone. And this would be practicable were it not for the numerous and powerful currents always flowing in the sea, by means of which a vessel, while steadily

headed toward the west, or toward the east, might be carried imperceptibly far to the northward or to the southward in the course of several days' sail, and this makes it necessary for every ship occasionally to verify the latitude by an observation.

As to longitude, Columbus had probably no means of ascertaining it at all, except by keeping a reckoning, as well as he could, of the distances which he sailed on each successive day. This, however, was a matter of no very serious moment, as his object was to sail due west until he came to land. So long as he had the means of getting his latitude right, he could keep nearly on the same parallel, and of course, in respect to longitude, there was nothing to be done but to go continually on.

And then, too, in returning, as he knew in what latitude Palos was, all that he had to do was to keep upon that parallel, and sail east till he came to it. He would be sure to come to it sooner or later, though not knowing his longitude precisely, he could not know precisely when to expect the land to come in sight.

Besides his instruments, Columbus had on board sundry charts containing delineations of supposed and imaginary islands and tracts of land, laid down according to the fancies or the theories of

different geographers and learned navigators who had speculated on the subject.

PUBLIC OPINION IN RESPECT TO THE EXPEDITION.

The work of getting the little squadron ready, and of making the other various preparations for the voyage that were necessary, consumed a large portion of the summer, so that the month of August arrived before the expedition was ready to sail. During all this time public attention was strongly turned toward the projected enterprise, and great was the difference of opinion entertained in respect to the feasibility of it. Some hoped for the best, and at any rate expressed good wishes. Some mocked and ridiculed the whole undertaking. The prevailing opinion was, however, that the adventurers were going forth on a desperate enterprise, from which it was very doubtful whether any of them would ever return.

THE DAY OF SAILING.

At length the day of sailing, which was the third of August, arrived. The day was Friday, and it would seem that Americans at least should for ever dismiss all superstitious ideas in respect to lucky and unlucky days, in consideration of the

fact that it was on a Friday that the expedition sailed, on the success of which the knowledge of the existence of the new world and everything connected with the whole course of its subsequent history depended. It was moreover on Friday that the expedition first came in sight of land.

The ships were to set sail early in the morning. On the day previous a grand religious service was held, in recognition of the dependence of those about to depart upon the blessing of Almighty God for all hope of success in their dangerous enterprise. Columbus, together with the whole company under his command, walked in solemn procession through the streets of the town to a certain monastery, where, in the chapel, mass was celebrated, and then all attached to the expedition confessed their sins, received absolution, and joined with the priests in offering up prayers to God that he would protect and bless them on their voyage, and bring them home again in safety.

The next morning at sunrise the squadron sailed. A large concourse of people assembled to witness the departure. The spectators lined the shores as the vessels moved away, some cheering them with loud acclamations, and others, especially the mothers and wives of those on board, engaged, with earnest gesticulations and many tears, in put-

ting up fervent prayers to the Holy Virgin to take them all under her blessed protection.

Columbus kept a regular daily journal during his voyage, a copy of which, drawn up in full, was prepared to be presented to the king and queen on his return. In the following chapter we present an abstract of this journal, made from the original document, in order to convey to the reader a more vivid idea than could otherwise be given of the incidents that occurred during the voyage, and of the aspect which the new and unknown scenes into which the party were ushered as they advanced on their way, presented to their view.

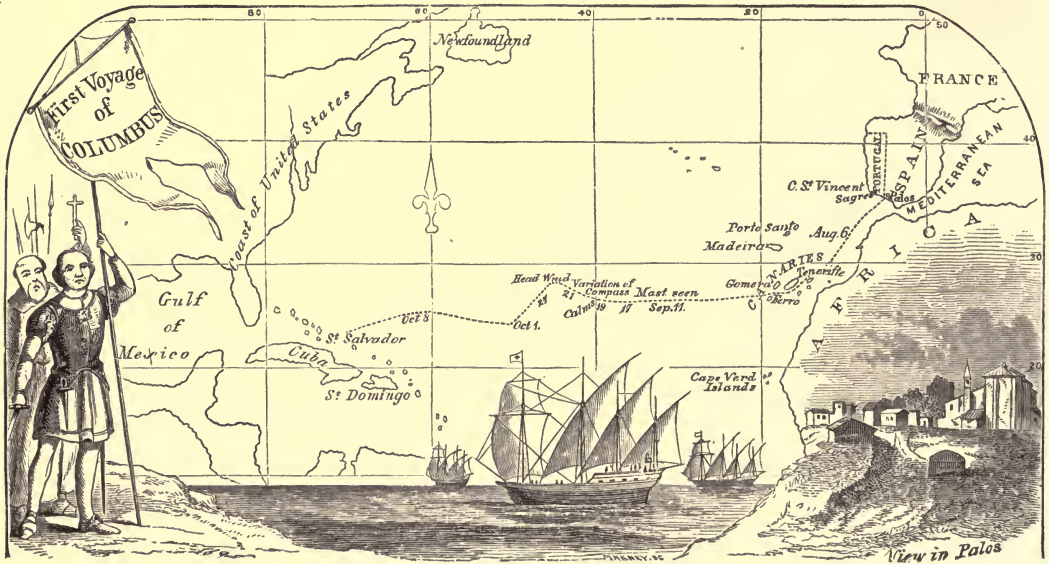
CHAPTER III.

JOURNAL OF THE FIRST VOYAGE OF COLUMBUS.

THE RUN TO THE CANARY ISLANDS.

August 3, 1492. The squadron crossed the bar at the island of Saltes half an hour before sunrise. By sunset of the same day it had gained an offing of about sixty miles. The ships were then headed to the southwest, toward the Canary Islands, distant about six hundred miles.

August 6. The rudder of the Pinta became unshipped or damaged in some way so as in a great measure to disable the vessel. It was suspected that two of the sailors had produced the mischief intentionally, at the instigation of the owner of the vessel, in order to interrupt the voyage, and some angry criminations took place between the officers and the men. Columbus was uneasy because the state of the weather prevented his going on board the Pinta to give directions in respect to repairing the damage. He, however, felt great confidence in the nautical skill of Martin Pinzon, who commanded the damaged vessel, which


First Voyage of Columbus
Newfoundland
Coast of United States
Gulf of Mexico
Cuba
St. Domingo
St. Salvador
Oct. 8
Oct. 1.
Head Wind
Variation of Compass
Mast seen
Calms
19
11
Sep. 11.
Gomera
Ferro
Canaries
Tenerife
Porto Santo
Aug. 6
Madeira
Cape Verd Islands
C. St. Vincent
Sagres
Palos
PORTUGAL
SPAIN
FRANCE
MEDITERRANEAN SEA
EUROPA
View in Palos

confidence it seems was well deserved, for Pinzon succeeded in refitting the rudder, so that the vessel could proceed.

August 7. The rudder of the Pinta gave way again, which occasioned a renewal of the difficulty that had occurred the day before.

August 8. It was time now, according to the reckoning, for the squadron to be drawing toward the islands, and a consultation was held among the commanders and pilots in respect to the precise direction in which it would be best to steer in order to find them. All gave their opinions, each judging as well as he could from the distance which they had come and the course on which they had sailed; and also from the floating of sea-weed, the flight of birds, and other such signs as navigators were accustomed to rely upon in those days for finding the land, in the absence of any precise knowledge from observations.

It proved in this case that Columbus' judgment was most correct. The vessels were steered in accordance with it, and soon the lofty peak of Teneriffe came into view.

The island of Teneriffe is one of the largest, and by far the most lofty, of the Canaries, and, therefore, it is always the first one that is seen. But the best harbor was at the smaller island of Gom-

era, a little further on. Columbus, accordingly, determined to proceed to Gomera, but the Pinta was compelled to come to, and cast anchor under the shores of Teneriffe, on account of the rudder being so much out of order. The vessel leaked, too, it was found, and Columbus determined to exchange her for another, if he could find one at the Canary Islands.

A MONTH AT THE CANARIES.

The expedition was detained a month at the Canaries before they were ready to put to sea again. As soon as the other two vessels were safe in port Columbus went immediately to Teneriffe to see about the Pinta, having found by inquiry that he could not obtain another vessel to take her place. It was found, moreover, that she could not proceed to Gomera, but must be repaired where she was. So they looked out for a sheltered place on the shores of Teneriffe, and there, careening her so as to get access to the damaged parts, they succeeded, after expending a great deal of pains and labor, in repairing her.

While the expedition was thus detained Columbus availed himself of every opportunity to inquire of the residents upon the island, and of the various seafaring men whom he met there, in regard to

any indications of land to the westward which they had observed or heard of. They all had stories to tell of rumors in respect to land having been seen in that direction. Columbus listened to these accounts with great interest, but they all proved in the end to be fabulous.

These rumors in respect to land, false as they were proved to be in the end, were encouraging in their influence at the time, but there were others which were somewhat alarming. A small vessel came from the island of Ferro, which lies a little to the southwestward of Gomera, and is the most westerly island of the group, with a report that a squadron of Portuguese vessels was lying in wait near that island in order to intercept Columbus and prevent the prosecution of the voyage. The motive was, it was said, a jealousy on the part of the Portuguese government lest the Spaniards should outstrip and supersede them in the work of discovering new countries to the westward. Columbus paid no attention to these rumors, and he saw nothing of any such squadron. The whole story may have been an invention of his sailors, many of whom were unwilling to proceed on the voyage, and seem to have resorted to all possible contrivances to thwart and prevent it.

While the expedition remained at Gomera they

saw some grand volcanic eruptions from the mountains of Teneriffe.

September 6. The expedition sailed from Gomera, or rather attempted to sail, on the morning of this day, but the air was perfectly calm and the sea like glass, so that they made no progress. They were drifted about this way and that by the currents all that day and all the night following, so that on the morning of the next day they found themselves between Gomera and Teneriffe. Thus they had gone back rather than forward.

September 7. The calm continued and the vessels made very little progress. They still remained in the immediate vicinity of the Canary Islands.

THE VOYAGE COMMENCED IN EARNEST AT LAST.

September 8. At three o'clock in the morning a fresh breeze sprung up from the northward, and immediately all sails were set, and the ships began to move swiftly through the water. In coming from Portugal to the present position of the ships the expedition had been navigating seas which the sailors were already familiar with, the voyage to and from the Canaries being very common in those days. The course which they had pursued, as will appear from the chart, lay nearly parallel to the coast of Africa, and not very far from it. But

now they were to strike out in an entirely new direction, steering due west, into seas wholly unknown, and it was consequently not until this time that their real voyage was begun

September 9. The wind was fresh and fair and the ships went on at great speed. The sailors, finding how rapidly the gale was bearing them away into wholly unknown regions, manifested some discontent, and Columbus, in order to diminish as much as possible any tendency to alarm which they might feel, began to adopt the plan of reporting on the log of the vessel a considerably smaller number of leagues each day than was actually run. He continued this system all the voyage. He kept a private account for himself, in which he entered the true numbers, but he showed to his men another account, in which the distance run each day was reduced, as much as he thought it would bear to be reduced without exciting suspicion. For twenty leagues he counted only sixteen, and for other numbers in proportion. Even his pilots were deceived by these false returns.

He probably thought that this was all right, the deception being practiced for a good motive, and being in some respects of the nature of a stratagem of war. But among all high-minded and honorable men at the present day such a falsification of

his own official documents by the commander of an expedition, made for the purpose of aiding him in the discipline of his crew, would be considered wholly inexcusable. It was certainly inconsistent with the exalted sentiments of moral duty, and, still more, with the high Christian principles, which Columbus professed to entertain. If the subordinate members of an expedition cannot rely upon the honesty of documentary statements made to them formally by their commander in his official character, in what case can they confide in him where he has any interest to deceive them?

September 11 The crews of the ships, of course, kept a close and constant lookout, not only in the direction of the western horizon, for land, but also in every direction over the surface of the sea, for any birds, marine animals, sea-weed, or floating objects of any kind which might come into view. They saw several objects of this kind on different occasions, but on this day they were all greatly excited by the appearance of a large portion of a top-mast, which they saw floating in the water. They were going at such a rate of speed, and the sea was so high, that they could not get the mast, and they were obliged to content themselves with watching it with the eye as long as it continued in sight. It was probably the mast of

some vessel which had been wrecked in the European seas, and had been brought out to this distance from the land by the currents.

VARIATION OF THE NEEDLE.

Sept. 13. Of course the vessels were steered by the compass, and whenever the sky was overcast there was no other guide. The position of the sun, however, even without the compass, would have helped the navigator very much in determining his course, and in the night the north star furnished a means of guidance which could be still more easily followed. And as it was, every night when the stars were to be seen, they furnished the means of verifying the indications of the compass, so long as they were true. Thus far, whenever these comparisons between the direction of the needle and the position of the star had been made by night, no deviation had been observed, but now Columbus found, to his great uneasiness, that instead of pointing toward the north star, the needle declined from it very sensibly toward the northwest.

The pilots and the sailors soon observed this phenomenon too, and they were more alarmed by it than Columbus had been. Columbus himself had felt no real concern, for the deviation thus

far observed could be of no serious consequence, since it extended only to a very few degrees; and as he was not steering for any determinate point, but only wished to go in a general direction toward the westward, a change of a few degrees in his course, one way or the other, would be of little consequence. If he should find, after going on for some days, that he was bringing the north star up too high in the evening sky, that would be a proof that he was gradually working to the northward, and then he could turn southward a little more; or if, on the other hand, he found the north star declining, he would know that he was making too much southing, and could, of course, by steering more to the northward for a few days, get back to his parallel. So long, therefore, as the needle varied but little, and was *steady* in its variation, so that the pilots could steer by it through the day, and compare it with the north star occasionally at night, all would go very well.

Sept. 17. The variation still continued. To ascertain precisely how great the deviation was, the pilots took the exact direction of a north and south line by an observation, and marked it carefully, so as to compare the compasses with it. They found the deviation very considerable. Columbus, however, in order to dispel the fears of the officers and

crew, and acting on his idea that he was justified in deceiving them, pretended to be not at all surprised, and told them that in point of fact the needle did not vary at all. It was the north star itself, he said, that moved. The star was only due north in that latitude during a certain portion of the twenty-four hours, and if they were to determine a north and south line by it the next morning at daybreak, they would find that the compass was right. The seamen were satisfied with these explanations, and as the sea was smooth and the winds favorable, and moreover as now every day increasing indications of land appeared, in the floating of sea-weed, the flight of birds, which were now and then seen, and other such signs, the whole company were in excellent spirits, and the crews of the vessels pressed their several embarkations forward, each trying to get in advance of the rest, in order to be the first to discover the land.

There were certain appearances in the clouds near the horizon toward the north, and also toward the south, which the sailors thought denoted land. But Columbus would not turn aside to ascertain the fact. "Those are only islands that lie there," said he. "We shall have time enough to visit them when we come back. All the main indications of land which we see come from the west, where,

if we persevere, and if it please Almighty God, on whom all success and all victories depend, we shall reach the shores of the Indies."

MID-OCEAN.

Sept. 21. The vessels had now arrived in mid-ocean, though of course those on board had no means of knowing how far they might be from shore. They were greatly encouraged to hope that they might be drawing toward the end of their voyage, for they saw many indications, as they thought, of the presence of land. Great quantities of sea-weed were floating in the water. They saw many birds, several of which, of a kind called by the English sailors *boobies*, came on board on different days. A smaller bird too, like a swallow, alighted on the rigging, and the sailors caught it. These were considered proofs that land was near, though in fact they were delusive indications, for the ships were now more than a thousand miles from any land. The sea-weed which they saw came from submerged rocks lying somewhere in those regions, or else was brought from a great distance by the ocean currents. Indeed, it is now known that this part of the Atlantic forms the centre of an immense eddy produced by currents flowing in different directions on the opposite sides

of it, so that great quantities of sea-weed, and portions of wrecks and other floating substances continually collect in it, and present all the appearances of close proximity to land.

The wind gradually declined and the air became calm, and for one or two days the vessels lay lifeless upon it. No land appeared yet in sight, and the sailors, whose spirits fluctuated with every changing feature in the aspect of the scene around them, began to be discontented again, and much alarmed. Nothing is more discouraging and depressing to any company on board a ship at sea than a long-continued calm. An idea began to prevail among the men on board the ships that they were getting into a region of the ocean where the wind never blew at all, and that consequently, if they went on much further, they would never be able to get back. This notion took such strong hold of their minds that the whole crew of Columbus' ship worked themselves into a great state of excitement, and were almost on the verge of mutiny. Their fear, however, that there would never be any more wind was at length dispelled by the rising of a strong breeze, which suddenly sprung up from the west. This was a contrary wind in respect to the progress of the voyage, but it came from precisely the right quarter to quiet the minds

of the sailors, since it blew directly back toward Spain. The wind drove the vessels considerably to the northward out of their course, as will be seen by the chart, but Columbus did not regret this much, on account of the favorable influence which the circumstance exerted on the minds of the sailors.

Sept. 23. Again it fell calm, and the sailors' murmurs returned. They discovered a new source of alarm in the fact that where they then were there appeared to be no swell of the sea, as is usual in the open ocean, even if there is no wind; for ordinarily, even when the air, for the time being, is calm in any given place, the water is agitated with a slow and solemn-moving swell, which is formed by the dying undulations which come from distant storms. There was now none of this ground swell, the sailors observed, and they considered this a proof that there were none but light and baffling winds in the region of the sea to which they had penetrated, and that they were consequently in danger of becoming hopelessly becalmed in it.

But in the midst of their fears it happened that a heavy ground swell arose, as it often does in such cases, and without any wind. This, of course, at once relieved the sailors' fears, and revived their

courage. Columbus said that he was thus saved by the coming in of a heavy swell from the sea, and it was the first time, so far as he knew, that any such case had occurred since the days when the Israelites were saved by the waves which overwhelmed the Egyptians.

FALSE CRY OF LAND.

Sept. 25. This evening, about sunset, as the ships were sailing smoothly and quietly along, suddenly a great shout was heard from the quarter deck of the Pinta, which was, as usual, sailing a little in advance of the others, and on looking in that direction, those on board Columbus' vessel saw that the shouts came from Martin Pinzon himself, the commander of the vessel, who was standing upon the quarter deck, and calling out LAND ! LAND ! with wild and earnest gesticulations, expressive of the utmost exultation and delight. Columbus called out to him to ask if he was sure that it was land that he saw. He said he *was* sure, pointing at the same time eagerly in the direction where he thought it appeared.

The whole crew of his vessel were gazing intently in the same direction, and a moment afterward they commenced singing a hymn, the GLORIA

IN EXCELSIS of the mass.* The enthusiasm, of course, at once spread to the other vessels; and the crew of Columbus' ship were soon all on deck, and as Columbus thought he could also now see the land, he gave the signal to them, and they sung the GLORIA IN EXCELSIS too.

As the shades of the evening drew on, the appearance of land became indistinct, and at length faded away; but the vessels were all steered in the direction which Pinzon had indicated, every one on board looking out eagerly all the time, and expecting every moment, as the night was not dark, to bring the land again into view. They went on until past midnight, and then slowly and sorrowfully came to the conclusion that they had been deceived, and that there was no land to be found.

PROSPEROUS CONTINUATION OF THE VOYAGE.

Oct. 8. For about ten days after the incident of the false announcement of land, Columbus advanced on his voyage in a very agreeable and prosperous manner. The sea was calm, the sky serene, and gentle breezes, bringing with them a soft and

* Glory to God in the highest. The hymns and prayers of the Catholich church were then, as now, expressed in the Latin tongue.

balmy air, wafted the vessels smoothly and yet pretty rapidly along. Birds were often seen flying to and fro, and sea-weed in great abundance continued to float in the water. The sea, moreover, was so smooth, and the air so spring-like and delicious, that Columbus said that nothing but the song of the nightingale was wanting to make them think that they were sailing on a river in the midst of some enchanted land.

Sometimes, when it was nearly calm, the crews amused themselves with fishing. There was a certain kind of golden-headed fish called the *dorado*, of which they caught several, and some days they saw great numbers of flying-fish skimming through the air all around them. At one time a *booby* came and alighted in the rigging, and a boy who was on board knocked him down with a stone which he threw at him. How he obtained a stone to throw the journal does not inform us. Perhaps the ship was ballasted with *shingle* taken from a beach.

During these ten days the sailors on the whole were pretty well contented, though the pilot of Columbus' vessel, who had kept an account of the false reckonings which Columbus had given him, said one day, with an anxious face and a sigh, after he had been adding them up, that from Ferro, the

last of the Canary Islands toward the west, to the place where they were, the distance which they had run was no less than five hundred and seventy-eight leagues!

The pilot would have had more reason still for the concern which he felt if he had known the true reckoning, for the real distance was over seven hundred leagues. Thus the expedition was more than one hundred leagues further to the westward than the men supposed.

This pilot recommended to Columbus to turn more to the southward, as the indications were strong, he said, of land in that direction. Columbus had hitherto been unwilling to turn aside from his course for any such purpose. He wished to push on as far toward the westward as he possibly could, so as to reach the actual shores of continental India before he was stopped. But now the signs of land became so numerous that he determined to veer to the southward somewhat more than he had done, and accordingly the ship's course, as will be seen by the chart, was now somewhat changed.

THE MUTINY.

October 10. The expedition proceeded on the new course for two days, but no land was to be

seen. Indeed, the signs and tokens of the proximity of land seemed to be diminishing. The sailors began again to be discouraged, and they uttered, both among themselves and in the presence of the officers, a great many murmurings and complaints. At last they said plainly that the voyage had been protracted long enough, and that they would not go any further.

Columbus made an address to them, endeavoring to dispel their fears, and giving them very alluring accounts of the rich reward they would all obtain in the treasures which they would find in the Indies as soon as they reached the land. He added, moreover, in conclusion, that whatever they thought of their situation, they must content themselves as well as they could and make the best of it, for he had set out upon the voyage with the intention of going to the Indies, and he was determined, by the blessing of God, to persevere till he reached his destination.

DISCOVERY OF LAND.

October 11. On this day, which was the very next after the difficulty with the seamen, there suddenly appeared proofs of the proximity of the land far more decisive than any which had yet been observed. The sailors saw several land birds,

and a branch of a tree still green, and also a piece of wood which had been cut with some sort of tool, and, what was more conclusive still, a branch bearing upon it something like berries, which had evidently grown upon the land, and which could not have been long in the water. Of course, all the officers and men on board of the several vessels became greatly excited. Everybody was looking out with the utmost eagerness, all anxious to secure the prize for being the first to see the land.

After sunset Columbus changed the course of the ships more to the westward again, supposing that the land lay to the southward of them, and desiring not to come too suddenly upon it in the night. About ten o'clock, as he was standing upon his lookout on the quarter-deck, surveying the horizon, he thought he saw a light. He called another person to come and look at it, and he, too, thought it was a light. A third person, who was asked to look, could not see it, and presently it disappeared. It afterward came into view again once or twice and seemed to be moving.

The sailors were accustomed to have a religious service on board, after the labors of the day and of the evening were over, in which they sang together the Ave Maria, a chant used in the Catholic worship. After the close of the service on this eve-

ning Columbus announced to them formally that he believed they were now very near the land, and advised them all to keep a careful lookout until morning. He promised to give a silk doublet, in addition to the reward which had been offered by the king and queen of Spain, to the one who should first see the shore. The reward which their majesties had offered was a pension for life, of considerable value.

At length, at about two o'clock in the morning, a cry of land was raised. The land was seen first by a sailor named Rodrigo de Triana. The sails were immediately ordered to be furled, all except one, which was necessary to steady the vessel in lying to, and in this situation they all waited for morning.

As soon as it became light the shore appeared in full view, and groups of savages were seen upon the beach, gazing at the vessels with every mark of wonder and admiration.

CHAPTER IV.

SEQUEL OF THE VOYAGE.

PREPARATIONS FOR LANDING.

As soon as the arrangements could be made Columbus prepared to land. As has already been said, he entertained very lofty ideas of the dignity of his mission, and of the exalted rank which he held as governor of the lands that he had discovered and as Lord High Admiral of the seas, and he deemed it proper that the act of landing should be effected in a ceremonious and formal manner. He accordingly dressed himself in his official costume, which was of a very rich and gorgeous description, and at the same time ordered the barge to be armed and made ready. The barge was brought alongside the several vessels in succession, and Columbus, with the two other commanders, were taken on board. Each bore in his hand a banner. Columbus carried the one which had been borne upon his own ship as the flag of the admiral. All the banners were embroidered with the crowns and initial letters of the king and queen of Spain.

The principal secretaries and other officers of the expedition also embarked in the barge, and a suitable number of seamen, some of whom were armed in order to act as an escort for the party and a guard, while others were to serve as oarsmen. In this manner the landing party left the ship and proceeded toward the shore.

THE CEREMONY OF TAKING POSSESSION.

The whole party, as they drew toward the land, were intently occupied in gazing at the scene which met their view, while the groups of natives, almost naked, that were gathered on the beach watched their coming with a still stronger expression of wonder and curiosity depicted upon their countenances. As soon as the boats reached the beach Columbus was the first to leap to the shore. The others followed him. They found themselves in the midst of an enchanting scene of tropical verdure and beauty. Before them were groves of trees covered with a dense foliage of the very richest green, and fruits and flowers of new and unknown forms were growing luxuriantly around them.

Columbus advanced a short distance upon the land, and then taking his station where he could be seen by all, he summoned the officers and sea-

men who had come on shore with him in the barge to gather around him, and then planting the staff of his banner in the soil, he called upon all present to witness that he took possession of that land in the name of their majesties the king and queen of Spain.

FORMING ACQUAINTANCE WITH THE NATIVES.

The remainder of the day was spent in making various observations and in forming acquaintance with the natives. Columbus said, in an account which he gave of these transactions, that he determined to treat the natives kindly, being convinced that they could be brought over to the Christian faith more easily by kindness than by force. So he distributed among them some gay-colored caps, glass beads, little bells and other such things as he had brought with him for the purpose, all of which seemed to please them very much, and they, in return, gave Columbus and his men parrots and balls of cotton thread, which it seems they had contrived in some way to spin, and javelins, which appeared to be their only weapons of war.

The relations thus established between the natives and their visitors became so friendly that in the course of the day many of the former swam off to the ships and were received on board, where

they expressed, so far as their exclamations and gesticulations could be understood, the utmost astonishment at everything they saw. Of course, there could be no communication except by dumb show, but the natives were very willing to attempt to pronounce such English words as the sailors gave them, and they succeeded so well in their efforts, and showed so much docility in trying to learn, that Columbus was convinced, he said, "that they could all be made Christians with very little difficulty."

They were, however, very poor, and apparently very ignorant and helpless. Columbus saw scars upon the persons of some of the men, and he asked by signs what was the cause of them. They signified in reply that the scars were from wounds given in a fight, and that the enemies with whom they fought came from some other islands near. The only weapons, however, which they had were the javelins above spoken of, which were formed of a simple shaft, pointed with the tooth of some animal. They seemed to have no idea of any cutting tool or weapon whatever, for when Columbus showed them a saber, one of them took hold of it by the blade and cut his hand with it, at which he and all the others seemed inexpressibly surprised.

COLUMBUS NOT SATISFIED.

Although the triumph of Columbus was now in one sense complete, his expectations and promises in regard to the discovery of land having been fully realized, still in one aspect of the scene before him he was far from being satisfied, and that was the appearance of poverty which both the country and the people presented. He had supposed that he was coming to the Indies, to a land rich in gold and gems, and in every other species of wealth that the heart could desire. A great many tales had been told by travelers who had visited India by the route over land through Persia and Arabia, of an island called Cipango, which lay to the east of India, and was said to be full to overflowing with every species of costly and precious treasure. There seems to have been no limits to the credulity of people in those days in respect to the wonderful richness of the east, and this island of Cipango in particular filled all imaginations as a sort of enchanted land where the fabulous narratives of the Arabian Nights, in respect to stores of golden utensils and precious gems laid up in the treasuries of princes, and vast accumulations of the richest merchandise in the markets were to be fully realized. It is now supposed that

Japan was the island actually referred to, under the name of Cipango, in the accounts which the travelers received, so that there was a real territory to serve as a foundation for these tales, although the pictures which they presented to the imagination were all splendid illusions.

Columbus' mind was full of Cipango when he discovered land, and he was somewhat disappointed to find that although the country of which he had taken possession with so much formality was beautiful, the inhabitants seemed to be miserably poor. They were willing to give anything that they possessed for a nail, or a glass bead, but then they seemed to have nothing to give but parrots, cotton balls, and rudely made javelins, barbed with bone.

ASTONISHMENT OF THE NATIVES.

The next day after the landing the number of natives upon the shore in the neighborhood of the vessels greatly increased—the new comers doubtless having been drawn to the spot by rumors of the arrival of the strangers, which had spread into the interior and along the coasts. Some came in boats which were made of logs hollowed out by fire. These boats were of various sizes, some being intended to carry only one man, while others were

large enough to contain forty or fifty. The Spaniards were surprised to see how well made these boats were, and how fast they could be propelled through the water. They were navigated by paddles shaped, as Columbus said in his account of them, "like an oven shovel." The boats were, however, very easily upset, and whenever one of them went over the natives all leaped out into the water, and then righting the boat they bailed out the water with calabashes, which they always carried with them for this purpose, and clambered in again. There were no clothes to be dried after such an accident as this, for the men were all naked.

Those that had no boats found no difficulty in swimming off to the vessels, whenever they wished to go on board.

The vessels all this time were anchored at some distance from the shore of the island, and within the reef. The water, being protected by the reef, was smooth, and so perfeetly clear that the bottom could be seen at a great depth.

The swell of the sea was rolling in heavily all the time against the outer face of the reef, but not disturbing the broad expanse of sheltered water within. The air was delightfully serene. The vegetation which adorned the shores was most

THE SQUADRON IN PORT.

luxuriant and beautiful. The natives, some assembled in wondering groups upon the beach, others passing to and fro in their boats, or swimming through the water, gave an aspect of joyous animation to the scene, while the vessels of the little squadron lay sleeping, as it were, upon the smooth expanse of water which on every side lay bordering the green margin of the land, like a silver frame encasing a pictured landscape of indescribable verdure and beauty.

The whole aspect of the scene was enchanting, and if Columbus could have but seen indications of substantial wealth at all corresponding with the charming tokens of natural fertility and beauty which everywhere met his view, all the aspirations of his heart would have been completely satisfied.

Columbus watched for every new company of savages that arrived from the interior, or came in boats from along the shore, and examined carefully everything that they brought, and especially all the ornaments that they wore, to see if he could find any gold. At last he found a small piece of this metal in a certain ornament that one of the savages wore. He made inquiries by signs where that substance came from. The natives answered by signs as well as they could, and after much gesticulation on both sides, and many different at-

tempts to make each other comprehend, Columbus thought that they meant to say that the land which they were then upon was an island, and that there were other islands near, some of which were inhabited by people who had a great deal of gold. They even had utensils made of it. This idea the speakers conveyed by pointing to their calabashes and to the little piece of gold at the same time, and by making signs to represent utensils of different forms. They also gave Columbus to understand that if he went on round their island to the other side, and then sailed south, he would come to one of the islands thus supplied with gold.

CRUISE AMONG THE ISLANDS.

After remaining a day at the place where he had first landed, Columbus set sail for the purpose of cruising along the shore, in order to make new discoveries. He determined to take some of the natives with him, and he accordingly seized a number of those who came on board and detained them. They were very much alarmed, and made every effort to escape, but Columbus kept them closely guarded, though he endeavored to allay their fears by making signs to assure them that he would treat them kindly, and bring them back again before long in peace and safety.

With these men on board his vessels for guides and interpreters, Columbus went on along the coast, and he afterward spent two or three months in cruising in those seas, following the shores of one island after another as they successively came into view, and looking everywhere for gold. His captive guides, by means of signs and gestures, and also before long in some degree by language, for they were very docile in repeating what was said to them, and soon began to learn quite a number of words, directed him which way to sail to find new islands. They gave him to understand that the islands were extremely numerous in those seas, and Columbus counted up more than one hundred, the names of which they knew and gave him.

Whenever, in the course of this cruise, the squadron approached any new coast, the natives came down to the beach full of wonder and astonishment, as they had done at the first island visited; and then when the boat from Columbus' ship came to the shore, at first they would appear very much frightened and would fly in all directions. But they were usually soon induced to return, and friendly relations were easily established with them. When once a good understanding with them was effected, they were ready to barter

anything they had for the most trifling articles offered them by Columbus, but the commodities which they had to sell were very few and of very little value. Columbus looked out everywhere very eagerly for gold. He had some specimens with him, which he showed to the natives on every island, and made signs to them to inquire whether they knew of such a substance, and if so, where it was to be found.

He usually obtained favorable answers to these inquiries, but the place where the gold was to be found was always at a distance. They told him, by signs, of course, that in such or such a direction there was an island where there was a king who wore clothes, and who had a great quantity of gold. The gold was so abundant on that island, they said, that the people had necklaces, and bracelets, and ear-rings, and other ornaments made of it. There was also, they said, an island inhabited by men who had only one eye, and another where the faces of the men were formed into a sort of snout or muzzle, like that of a dog. The stories told about the gold were obviously entitled to very little credit, coming as they did in connection with marvelous and ridiculous tales like these. Still Columbus and his men more than half believed them.

SEARCH FOR SPICES.

One of the chief elements in the wealth of the Indies consisted in the spices which grew there, supplies of which had heretofore been brought to western Europe by caravans of merchants traveling overland. In order to facilitate his search for these precious productions in the countries which he should discover, Columbus had taken the precaution to bring specimens with him to show to the natives. Accordingly now, wherever he landed, he took with him small quantities of cinnamon, pepper and other spices, and showed them to the people, making signs to them at the same time to inquire whether they were acquainted with those articles, and, if so, if they knew where they grew. In answer to these inquiries sometimes the Indians seemed to say that they knew nothing about them, and at other times they indicated places where they grew, but in the end all the indications failed, for no spices could be found. In fact, Columbus was at this time almost at a distance of half the circumference of the globe from the countries in which spice-bearing plants had ever grown.

LANDING UPON CUBA.

In the course of his cruise Columbus reached the island of Cuba, and he explored the coast of it

for many leagues. The extent and beauty of the island had been represented to him by the natives of other islands, before he reached it, in such glowing colors, that he had believed from their accounts, so far as he could understand them, that it must be Cipango itself, and he approached its shores with his hopes and expectations exalted to the highest pitch.

He entered a sort of bay where a river, coming down from the interior, emptied into the sea. After his vessels were moored he took his boat and rowed some distance up the stream to view the interior of the country. He was amazed at the exuberant magnificence and beauty of the scene which presented itself to his view. There were forests of lofty trees, which were adorned with the richest and most luxuriant foliage, and banks covered with beautiful flowers, and birds of unknown forms and resplendent plumage flying to and fro, and water so pellucid and clear that the boat, in gliding over the surface of it, seemed to be moving in mid-air. The whole scene presented, as Columbus said, a spectacle the most charming that the human eye had ever reposed upon.

AN EMBASSAGE SENT INTO THE INTERIOR.

At one time, while cruising along the shores of

Cuba, Columbus obtained information which seemed to him so definite in respect to a chief or king who lived at some distance in the interior, that he determined on sending an embassage to his court. He designated two of his ship's company on this service. The name of one was Rodrigo de Jerez, and of the other Louis de Torres. The latter was a Jew, and he was selected for this duty on account of his attainments as a linguist. He was acquainted with the Hebrew and Chaldee languages, and he had some knowledge also of Arabic. Columbus, acting under the illusion that he was upon the eastern shores of India, supposed that these languages might possibly be found of some service in communicating with the natives of the country. Two of the Indians, who had been taken from the first island that he had visited, were to go too. They had at this time been with the expedition for several weeks, and they had learned so many words, and, moreover, had become so accustomed to communicating with the Europeans by signs, that they were likely to be of considerable service as interpreters.

The two embassadors were provided with small pieces of gold, and also with specimens of spices, to show to the people whom they should see, with a view to inquiries in respect to the existence of such

substances in their country. They were also instructed, in case they should reach the capital and gain access to the king, to represent to him, as well as they could with such interpreters as they had, or by signs, that Columbus, their chief, had come from a great country far beyond the sea, called Spain. That the king of Spain, who was the monarch of a mighty empire, had sent Columbus with a present and a letter for the Indian king, in order to inquire after his health and prosperity, and to make a league of friendship with him.

The embassadors were also provided with a supply of necklaces, strings of beads, needles, bells and other such things which were to be used, both as presents to conciliate the good will of the people they might visit, and also as a medium of exchange to procure by barter from the natives whatever they might require for their own personal wants. They had permission to extend their absence to six days.

In due time the embassage returned, bringing back a long account of savages, and rude huts, and a village, and javelins tipped with bone, and balls of cotton thread for sale—but no gold, no spices, and no king. Nor had the learned Jew found any occasion to call into requisition his stores of Chaldaic or Arabic lore.

GENERAL TREATMENT OF THE NATIVES.

Columbus treated the natives generally with great kindness wherever he went. Whenever, on approaching a new island, he could secure one of them on board his ship, either by overtaking him in his boat far away from land, or by any other mode, he would take care that he should not be harmed in any way, but would direct the sailors to feast him with such food and drink as they thought would be agreeable to him, and show him all about the ship. He would then present him with a number of gifts and set him free again in his boat, in order that he might go on shore and tell his countrymen that the strangers that were coming were good and kind, and that there was no occasion to be afraid of them. The effect of this policy—for Columbus admitted that he acted thus from considerations of policy alone—was to allay all the fears which the natives of the islands would otherwise have felt, and to make it very easy for the commanders and crews of the vessels to land at once whenever they approached any shore, and to enter immediately into the most friendly relations with the natives.

Columbus, however, did not recognize any title whatever to the lands which they occupied in the natives themselves. Wherever he landed he took

possession of the country in a formal manner in the name of the king and queen of Spain, and he set up crosses, made of planks, at all these stations, and consecrated them with the most solemn ceremonies, as if he were acting under a commission from Jesus Christ, to seek, among these unknown islands of the sea, new regions to be added to his spiritual kingdom. Indeed, there was a strange incongruity in the motives which seemed to actuate him in all this exploring cruise among the islands —an exalted religious enthusiasm, which seemed sometimes quite sublime, mingling with a very eager appetite for worldly wealth and power. Crosses and holy banners in one hour, and in the next Cipango, spices and gold.

KIDNAPPING THE NATIVES.

During the whole progress of this expedition Columbus seemed to have thought himself authorized by a divine commission to set aside all the ordinary rules of justice and humanity whenever occasions arose in which the success of his mission might thereby be promoted. It occurred to him, while he was making this tour, that it would be well to take some of the natives home with him to Spain, in order, first, that he might exhibit them there as proofs and trophies of his success, and

secondly, that they might learn the Spanish language, and so become interpreters for future expeditions. Accordingly, when the time for his return to Europe began to draw near, as he was passing along the shores of St. Domingo he stopped opposite the mouth of a small river, and as usual opened friendly communications with the natives. At length, when their suspicions and fears were entirely allayed, and they began to come freely on board the vessels, he selected a party of young men who came out together in a boat, and when they had been received on board his vessel he enticed them below and made them all prisoners, except one whom he allowed to return to the shore with the boat.

Immediately afterward, thinking, as he said, that it would make the young men feel more contented with their lot in being taken to Europe against their will if they had wives to go with them, he sent on shore upon the other side of the river, where there was a village, and caused seven women and three children to be seized, all of whom were brought on board and held as prisoners, together with the men.

The next day the husband of one of the women came out to the vessel and begged that if his wife could not be released he might be taken too, to go

with her. To this Columbus agreed, and the man was received on board.

It was said that in a day or two all the prisoners seemed tolerably contented with their fate. It is possible that they might have been really so, for it seems they thought that they were going to be taken to heaven. It was the general impression among the natives on all these coasts that the strangers had come down from the skies, and were going to return thither again. They seem to have imagined that the vessels were of the nature of immense aquatic birds that had descended from mysterious regions in the upper air, and alighted upon the water, where, having folded their wings, they were now reposing, and that after moving for a time slowly along the coasts, till they had accomplished the objects of their visit, they would go back as they came, by ascending into the air.

It would seem, however, that the contented spirit which the captives manifested was, after all, only assumed for the purpose of putting their captors off their guard, for a few days after they were taken two of the young men, watching their opportunity, leaped overboard and swam ashore.

Columbus justified his seizing the women, in order to furnish the other prisoners with wives, by an argument which showed how utterly regardless

he was of all the rights of the natives whenever the supposed interests of the expedition, or of his plans of discovery, came in conflict with them. He says that negroes from the Portuguese settlements in Africa had several times been taken in this way and carried to Portugal, where they had learned the language, and then had afterward been taken back to Africa by other expeditions, with a view of being made useful as interpreters. But always in such cases, as soon as the prisoners reached the African shores again, they invariably took the first opportunity to make their escape, and were thenceforth heard of no more; and if, in order to prevent these escapes, the men were kept confined, very little use could be made of them as guides and interpreters.

The idea which Columbus now entertained was, that in the course of the voyage, and during their stay in Portugal, the men whom he had taken would form matrimonial connections, more or less regular, with the female captives, and then when he brought them back to their native islands again he could maintain a strong hold upon them by retaining their wives and children on board the ships while they themselves were engaged on shore in discharge of their duties.

VISIT FROM A CAZIQUE.

At one time, while the ships of Columbus were lying off the shore of St. Domingo, a native chieftain, called a *cazique*, came on board to pay the strangers a visit. He was naked, but he came in great state—being borne on the shoulders of four men, in a sort of palanquin or litter made of poles, and attended by a guard of two hundred retainers. He came off to Columbus' ship in his own boat, and on coming on board he was conducted at once into the cabin, where Columbus, as it happened, was at that time taking his dinner. The men who came with him, excepting two, remained outside, sitting on the deck, before the cabin door. The cazique, when he had entered the cabin, was invited to take a seat, and he did so. The two who came in with him—his prime minister and his secretary, as was supposed—sat down at his feet upon the floor, and watched him all the time, as if ready, on the instant, to obey any command that he might give them.

Refreshments were offered the cazique, both food and drink. He merely tasted of what was given him, and then sent the dish or the vessel to his men outside, who ate and drank the whole with great eagerness. The cazique seemed exceedingly

interested in everything that he saw, and Columbus presented him with many of the articles which particularly attracted his attention. Among them was a curtain which hung before a berth in the cabin, a pair of shoes made of a certain colored stuff, some amber beads, a phial containing orange-flower water, and other such things.

The cazique was extremely delighted at receiving these gifts. He talked and gesticulated a great deal, and seemed very much distressed that Columbus could not understand what he wished to say.

Columbus showed him the effigies of Ferdinand and Isabella on a coin, and made signs denoting that those were the heads of his sovereigns. He also endeavored to communicate to him, by signs, an idea of the great extent and power of the kingdom over which these rulers held sway.

At length, when night began to come on, and the cazique signified that it was time for him to withdraw, he was dismissed with honor, being saluted at his departure by discharges of musketry. He went on shore in his boat, and was there received by his escort and borne away as he came, on his palanquin.

DISASTERS.

Everything went prosperously and well with

the expedition from the first discovery of land, early in October, for more than two months; but at length, toward the latter part of December, Columbus encountered a train of very serious disasters. The first stroke came upon him suddenly, like a thunder-clap out of a clear sky.

It was on Christmas day, the twenty-fifth of December. His vessels had been sailing along the coast for several days, and as usual in such cases he had himself been constantly on deck, making observations upon the land, and at last, about eleven o'clock at night, on the above named day, observing that the way was clear for some distance forward, and that the sea was smooth, he went below, leaving the pilot in charge of the helm.

In about an hour he was awakened by hearing a loud call upon the deck. He rushed up the gangway and found that the vessel was aground. The pilot, it seems, as the commander had gone away and everything was quiet, had concluded to take a little rest himself, and he had put the helm into the hands of a boy, directing him how to steer, and had then lain down and gone to sleep. The boy remained at the helm, but either on account of some current which drifted the vessel out of its course, or else from not understanding his

duty, or perhaps getting sleepy, and thus not properly attending to it, he allowed the vessel to work too near the reef. He was at length aroused from his reveries by feeling the rudder strike upon something below, and immediately afterward he heard the sound of the breakers alongside. He was greatly alarmed and called out for help, and Columbus, who was always on the alert, was the first to answer to the summons. The vessel went upon the rocks so gently that nobody perceived it when she struck.

She was now, however, fixed to the spot, though she rose and fell gently with the swell, as she lay upon the rocks. The first thing to be done in such a case is always to send out an anchor astern, and then by means of the windlass or the capstan endeavor to draw the vessel off from the rocks into deep water again. This Columbus attempted to do. He ordered a boat to be lowered and an anchor to be put into it, and then directed the second officer and a suitable number of men to get on board and row back into deep water, in order to set the anchor there.

But the second officer seemed to think that this was a case in which each man was justified in looking out for himself, so instead of going out with the anchor, he turned his boat, as soon as he got

clear of the vessel, and pulled off toward the Niña, which was very near. The Pinta had been separated from the rest of the squadron some time before, and no one knew what had become of her. The Niña, therefore, afforded the only hope of escape for the whole party in case of the Sancta Maria becoming disabled.

But the commander of the Niña would not allow the deserters to come on board. He ordered them back to their duty. At the same time he sent his own boat, with a crew of able-bodied men, to the aid of Columbus.

In the meanwhile the tide was falling, and the Sancta Maria began to settle over upon her side. The masts were immediately cut away to relieve her, but to no avail. The seams soon began to open and water came in. Columbus was obliged to abandon her for fear that she would go to pieces before morning with all on board. So he took the men off in the boats to the Niña, which was laying-to as near as possible to the wreck, and waited for day.

CONSEQUENCES OF THE LOSS OF THE SANCTA MARIA.

Early in the morning Columbus, finding that his vessel was a total wreck, sent messengers to a chieftain who lived on the island not far from the

spot, to inform him of the calamity which had befallen him. The chieftain immediately came down to the beach and repaired on board the Niña, and there expressed to Columbus the utmost possible concern for his misfortune, tendering at the same time every assistance that was in his power. He set apart several large huts on the shore to receive and shelter the men, and he offered to provide boats for removing the cargo of the ship to the land. These promises were fulfilled in the most faithful manner, both on the part of the chief himself and on that of all his subjects. The natives went to work in the most earnest manner to help the strangers in their distress. The goods on board the wreck were mostly saved, and were transferred to the shore, where they were all placed in safety and under shelter; and accommodations, as comfortable as the nature of the case would admit of, were provided for the men until there should be time to decide what to do.

The result was that Columbus came to the conclusion that he could not safely undertake to transport all his men back to Spain in the Niña, which was now the only vessel that remained. So he determined to build a sort of fort upon the land, and leave a part of his company there in charge of the stores saved from the wreck, until he should

have time to proceed to Spain and return with men and supplies sufficient for the establishment of a regular colony.

CONCLUSION OF THE VOYAGE.

Columbus readily obtained the consent of the native chief that he should build a fort upon his territory, and he had no difficulty in inducing a sufficient number of men to consent to remain as the garrison of it. He accordingly marked out the boundaries of a sort of camp, and his men, with the help of the natives, dug a ditch about it and inclosed it with a strong palisade. They also raised a rampart and placed upon it the guns saved from the wreck. Within this fortress he deposited all the stores which he was intending to leave. Huts were built, both to shelter the goods and also to serve as dwellings for the men. Columbus appointed a certain gentleman named Diego de Arado to the command of this little colony during his absence, and soon afterward, taking all the rest of the company with him on board the Niña, he set sail for Spain.

Of the incidents and adventures which he met with on his voyage home—of his meeting with the Pinta again after a long separation, and thus being able to relieve in some degree the crowded con-

dition of the Niña—of the terrible storm which he encountered when he began to draw near to the European shores—of his retiring to his cabin when all hope of being saved seemed to disappear, and writing there upon parchment a brief account of discoveries, with directions for others to follow in order to reach the shores that he had found, and inclosing the writing first in oil cloth, and then in a cake of wax, and finally in a cask, which, after being carefully closed, was thrown into the sea—of the subsequent subsiding of the storm and happy escape of the vessels from their great danger—of their touching at the Azores, and finally, by stress of weather, being forced to make a port in the mouth of the Tagus—of Columbus' going up thence to Lisbon, and being received very honorably by the king of Portugal—and finally, of his sailing again from the Tagus and arriving safely at Palos, the port from which he had departed about eight months before, and of the universal joy and enthusiasm with which he was received, the ringing of bells, the firing of cannon, and the grand processions with which the great discoverer was conducted through the town—of all these things, as well as of the many other wonderful adventures which befell him in his subsequent voyages, and the extraordinary reverses which he encountered

in the course of his eventful life, we cannot speak particularly here. It is time to leave Columbus and pass on to scenes and incidents more directly connected with the progress of discovery on that portion of the continent which is the special scene of the events to be narrated in these volumes.

CHAPTER V.

DISCOVERY OF NORTH AMERICA.

SEBASTIAN CABOT.

Among the earliest and most celebrated of the navigators who followed Columbus in the track which he opened to the world across the Atlantic was Sebastian Cabot, whose name figures quite conspicuously in the history of the time, from the fact that he, in connection with his father, was the first to discover and explore the coasts of North America. Cabot made his voyages, too, under the authority of the king of England, as Columbus had done under that of the king of Spain. And thus, while all the countries lying in the central portion of the continent were taken possession of in the name of Spain, and became subject to the Spanish dominion, Cabot planted the English flag upon the more northern portions of the continent, and from this it resulted that, in process of time, they became the seat of English colonies.

The Anglo-Saxon populations, therefore, that at the present day thrive so prosperously in all the

northern portions of the new world, look back to Cabot as the great precursor and pioneer of the thirty or forty millions, now established on this continent, that speak the English tongue.

THE CABOT FAMILY.

And yet Cabot was not an Englishman—at least he was not of English parentage. His father, like all the other principal navigators of those times, was an Italian. He received his nautical education upon the Mediterranean Sea. Both father and son seem to have been plain and unpretending merchants and navigators, intent on making their voyages, and not concerning themselves much about preserving records of them. It was sufficient for them to enjoy the satisfaction at the time, of roaming about the world in search of adventures and discoveries, and of the means of acquiring wealth. They seem to have thought very little of the interest that posterity would feel in learning the particulars of their exploits. The consequence was that they left no detailed account either of what they did or of what they saw, and the only information now possessed in regard to them comes from various disconnected sources. In fact, it is due rather to fortunate accident than to any other cause that any memorials whatever of

their first voyages have been preserved. It is said, however, that the Cabots did not wholly neglect the duty of preserving a record of their adventures for the instruction of posterity, as Sebastian left behind him at his death a considerable number of charts, journals and other documents, which were intended for publication. But in some way or other this intention failed of being carried into effect. None of these records are now known to exist.

GENERAL INTEREST AWAKENED IN COLUMBUS' DISCOVERIES.

Of course, as soon as Columbus returned from his first voyage and reported his having crossed the ocean and discovered land so far on the way toward India, the news spread rapidly through all the seaports in Western Europe, and all seafaring men occupied themselves with discussing the innumerable questions which at once arose. The various governments, too, of Western Europe were greatly interested in these discoveries, and each of them began to form designs of sending out expeditions to find new lands, and to take possession of them in their own name.

Among the seafaring men whose attention was strongly attracted to this subject was John Cabot, Sebastian's father. He was, as has already been

said, an Italian, but he was at this time residing with his family in Bristol, in England, which was then, as now, a very important seaport. He came to Bristol from Venice, where he had previously lived for fifteen years. This has been shown by certain registers remaining among the public archives at Bristol, which historians had the curiosity to examine long after Cabot's day, when the world began to feel an interest in being informed in respect to his origin.

John Cabot received the news of Columbus' discoveries at Bristol, and he immediately began to study his charts and his globe, and to speculate on the best track to be followed for reaching India. He became convinced that the route which Columbus had pursued—that is, in a direction due west from Europe—was not the best course. It might be supposed by one who has not examined the subject attentively, that if two places lie on nearly the same parallel of latitude, as is the case, for example, substantially, with the eastern coast of Central Asia and Spain, the nearest way to reach one from the other would be to sail exactly east or west. But this is not the fact, as may be demonstrated very easily by means of a globe. The shortest distance from New York to Havre, for instance, as will appear by stretching a thread

upon the globe from one of these points to the other, will pass considerably to the northward of either of them. In the same manner the most direct course from the center of Spain to the middle of the Pacific Ocean in the same latitude—which was about the region where, in those days, the eastern shores of India were expected to be found—lies, not through the region of the West India islands, where Columbus had been seeking it, but through the very heart of Greenland!

By an inspection of the map this does not appear to be so, but by stretching a thread from one point to the other on the globe it will be made very clear.

Persons making a voyage across the Atlantic to Liverpool, when they find, as they sometimes do, from the daily report of the latitude and longitude made by the captain, that they are actually further to the north than the northern extremity of Ireland, are very much surprised; and having no globe at hand to correct the erroneous impressions obtained from maps, can hardly be persuaded that the ship has not gone out of her way. The fact is that the most direct line from New York to Liverpool passes through a part of Newfoundland, and thence continues, crossing the parallels of latitude, till it reaches a point far to the northward of the

port of destination, after which it declines to the southward again as it approaches the port.

John Cabot, Sebastian's father, in reflecting upon these and similar facts, convinced himself that the true way of endeavoring to find a passage to India was to sail much further to the northward than Columbus had done, and he began at once to endeavor to obtain from the English government the means of making an expedition. He succeeded in this, it seems, though nothing is known of the steps that he took, or of the difficulties, if any, which he encountered. He received from Henry the Seventh, who was then king, a formal commission to proceed on the voyage, and to take possession of all the lands that he should discover, in the king's name.

THE LETTERS PATENT.

The letters patent* received by Cabot, the father, were written, as such documents usually were in those days, in Latin. It will be interesting and useful to the reader to see one specimen of the sort of commissions which these ancient navigators received from their respective governments;

* The word *patent* means *open*. Letters patent are letters open to all the world, that all who see them may govern themselves accordingly.

and we accordingly give this one in full, as found translated into the English of that day, in the old black letter folios in which such annals were recorded in those times :

The Letters Patents of King Henry the Seventh granted vnto Iohn Cabot and his three sonnes, Lewis, Sebaſtian and Sancius, for the discouerie of new and vnknowen lands.

Henry, by the grace of God, king of England and France, and Lord of Ireland, to all to whom these presents ſhall come, Greeting:

Be it knowen that we haue giuen and granted, and by these presents do giue and grant, for vs and our heires, to our well beloued Iohn Cabot, citizen of Venice, to Lewis, Sebastian and Santius, sonnes of the sayd Iohn, and to the heires of them and euery of them, and their deputies, full and free authority, leaue and power, to saile to all parts, countreys and seas of the Eaſt, of the Weſt, and of the North, under our banners and ensignes, with ſiue ſhips of what quantity or burden soever they may be, and as many mariners or men as they will haue with them in the sayd ſhips, upon their owne proper coſts and charges, to seeke out, discouer and finde, whatsoeuer isles, countreys, regions or prouinces, of the heathens and infidels, whatsoeuer they be, and in what part of the world soeuer they be, which before this time haue been vnknowen to all Chriſtians; and we haue granted to them, and also to euery one of them, the heires of them, and euery of them, and their deputies, and haue giuen them licence to set up our banners and ensignes in euery

village, towne, caſtle, isle, or maine land of them newly found.

And that the aforesayd Iohn and his sonnes, or their heires and assignes, may subdue, occupy and possesse, as our vassals and lieutenants, getting vnto vs the rule, title and iurisdiction of the same villages, townes, caſtles, and firme land so found. Yet so that the aforesayd Iohn and his sonnes and heires, and their deputies, be holden and bounden of all the fruits, profits, gaines and commodities growing of ſuch nauigation for euery their voyage, as often as they shall arriue at our port of Briſtol, (at the which port they shall be bound and holden onely to arriue), all manner of neceſsary coſts and charges by them made, being deducted, to pay vnto vs in wares or money the fift part of the capital gaine so gotten; we giuing and granting vnto them and to their heires and deputies that they shall be free from all paying of cuſtomes of all and singular such merchandize as they shall bring with them from those places so newly found.

And moreouer we haue giuen and granted to them, their heires and deputies, that all the firme lands, isles, villages, townes, caſtles and places, whatsoeuer they be, that they shall chance to finde, may not of any other of our ſubjects be frequented or visited without the licence of the foresayd Iohn and his sonnes and their deputies, vnder paine of forfeiture, as well of their ſhippes as of all and singular goods of all them that shall presume to saile to those places so found.

Willing and moſt straightly commanding all and singular our subjects, as well on land as on sea, to give good aſsiſtance to the aforesayd Iohn, and his sonnes and deputies, and that as well in arming or furnishing their

ſhips or veſsels, as in prouision of food, and in buying of victuals for their money, and all other things by them to be prouided neceſsary for the sayd nauigation, they do giue them all their helpe and fauour.

In witneſse whereof we haue caused to be made these our Letters patents. Witneſse ourselfe at Weſtminſter, the fift day of March, in the eleventh yeere of our reign.

The sum and substance of all this is that John Cabot and his sons were empowered to fit out an expedition at their own expense for the purpose of making discoveries, on condition that they were to take possession of all the lands that they should find in the king's name, hold them subject to him, and also pay him one-fifth of all the profits which should accrue from their operations.

THE OLD MAP AT WHITEHALL.

The next memorial that remains of the voyages of the Cabots is a copy—contained in the works of ancient authors who wrote about a hundred years after the time that the voyages were made—of a legend or inscription which was recorded on a certain map which was then said to hang in a gallery of the royal palace at Westminster, and also in the houses of several private gentlemen. The map itself that was in the palace has disappeared. It is

supposed to have been destroyed at the time of a fire No copy of it is known to exist in England, though it is said that a copy has been recently found in Germany. The copy of the inscription which we now have is one that has been preserved by being transferred, while the map was in existence, to the works of certain historians who were then attempting to ascertain the particulars of Cabot's life. The inscription upon the map was in Latin, but the purport of it was as follows:

THE INSCRIPTION ON THE MAP.

In the year of our Lord 1497, John Cabot, a Venetian, and his son Sebastian, with an English fleet from Bristol, discovered this land on the 24th of June, about five o'clock in the morning. He called the land Prima Vista, that is, first seen, because, as I suppose, it was that part whereof they had the first sight from the sea. The island which lies out before the main land he called St. John's, as, I think, because it was discovered on the day of St. John the Baptist. The inhabitants of the land are clothed in skins of beasts, and they hold them in as great estimation as we do our choicest garments. In their wars they use bows and arrows, pikes, darts, wooden clubs, and slings. The soil is barren and produces no fruit, but is full

of bears of a white color, and stags larger than ours. It abounds in fish, some of which are very great, as, for example, sea wolves (seals). There is a fish too, commonly called salmon, and soles more than a yard long. The island also produces hawks, though they are so black that they look like ravens, and also partridges and eagles, which are also black.

OTHER SOURCES OF INFORMATION.

We might go on in this way and mention in detail the different disconnected and accidental memorials from which all that we now know of the voyages by means of which the coasts of North America were first discovered, has been learned, but these specimens will suffice for our object, which has been merely to give the reader some general idea of the nature of the materials from which the history of early transactions of this kind is often derived. Next to this inscription on the map comes a record of a conversation which a certain Roman legate in Spain held with Sebastian Cabot, the son, some years afterwards, which conversation the legate reported in a certain written communication, by which means it was preserved and in due time published. There are many other incidental allusions of a similar kind scattered through

the works of many different authors, written in many different languages. All these have in later times been carefully collected and compared, and various attempts have been made to deduce from them a simple and connected narrative. Many points, however, are not clear, and many difficulties and discrepancies have arisen which have led to quite earnest controversies. We shall content ourselves with relating the prominent facts according to the prevailing understanding of them at the present day.

THE FIRST VOYAGE.

The patent was granted to Cabot and his sons in March, 1496. It was not until the following spring that the ship was ready to sail. The name of this ship was the Matthew.

It is pretty certain that of the three sons of John Cabot, Sebastian was the only one who accompanied his father on the expedition. The other two sons are named in the letters patent as members of the company who were to direct the undertaking, but there is no evidence that either of them went on the voyage. It has been considered doubtful whether John himself went, as there seems to be no direct reference to him in the accounts of the voyage that remain; and Sebastian

is almost always spoken of as the actual discoverer of the lands which were visited.

However this may be, the expedition sailed early in the summer of 1497, and after crossing the Atlantic, the voyagers discovered land in a high northern latitude. It is supposed that the land which they saw was the coast of Newfoundland or of Labrador.

THE SECOND VOYAGE.

On the return of the ship the news that land had been reached in that quarter of the world awakened great interest in England, both at court and among the merchants in the seaport towns, and arrangements were immediately made to send out a larger expedition. A new document, sometimes called a new patent, was obtained from the king, under which several ships were provided, and several hundred men enlisted, with a view of exploring the country more fully, and establishing a colony upon some portion of it, if a suitable site should be found, and if not, of finding some strait or opening through which the expedition might go on, and finally reach the eastern shores of India.

Quite a number of merchants, not only of Bristol, but also of London, took a deep interest in

this expedition, and many of them sent ventures of merchandise in the ships, to be traded with the natives of the countries which might be found. These ventures consisted of coarse cloth, caps, laces, knives, needles, beads, and other such things. Those who sent them expected to receive something extremely valuable in return—curious ornaments, perhaps, of gold and silver, or pearls, or gems, or costly spices.

This second expedition is known to have been under the command of Sebastian Cabot, notwithstanding that he was now only about twenty-two years old. It is supposed that in the interval his father had died.

OBSERVATIONS ON THE LAND.

There is some confusion in the accounts that remain of these two expeditions, making it difficult to keep the occurrences which took place in them distinct. In one or the other of them, or perhaps in both, on reaching the land, an exploring party went on shore to make observations upon the country and upon the inhabitants, and also upon the plants and animals which it produced. Cabot soon satisfied himself that he had not yet reached India, and he accordingly returned on board his ship with the view of continuing the voyage.

ADVANCE TO THE NORTHWARD.

The fleet sailed to the northward, keeping all the time near the coast, in hopes to find a passage through the land leading toward the west. The voyagers went on in this way until they reached a region where the sea was full of floating mountains of ice, which they were all very much surprised to behold. It is now known that these mountains of ice are brought down in a stream from Baffin's Bay, where they are formed by glaciers protruding into the sea, as described in a former chapter.

The expedition went on, but instead of discovering any opening leading toward the west, they found that the further they proceeded the more the coast seemed to trend toward the east. Precisely how far toward the northward they went is not certainly known, as the different accounts and statements in regard to this point do not agree. They, however, attained to so high a latitude that the day continued, as it were, during the whole twenty-four hours, and the sea became so encumbered with floating mountains of ice that it was dangerous to proceed any further.

MUTINY

The sailors, too, and, in fact the whole company became discontented and afraid. They were

appalled by the strange appearances which nature presented to their view in those remote regions. The immense icebergs floating in all directions around them; the bears and other uncouth monsters that they found haunting the floes; the unwonted aspect of the heavens, with the sun revolving in circles almost parallel with the horizon, and thus producing no proper night and no real and genuine day; all these things terrified them and filled their minds with a solemn awe. They were determined that they would proceed no further, and Cabot was finally compelled to yield to the mutinous spirit manifested by his crew. He accordingly turned his course toward the southward, in hopes to find some opening in that direction through which he might penetrate the land, and continue his voyage toward the Indies.

RETURN OF THE EXPEDITION.

The expedition pursued its course southward along the eastern coast of North America, looking everywhere for some opening in the land by which to pass on toward the west. But none was to be found. They went on in this way until they came to the West India islands, which had already been discovered and taken possesoin of by Columbus, and then, their provisions, moreover, having by this

time become nearly exhausted, they returned to England, bringing with them, of course, no treasures, and no very encouraging report of the lands which they had seen. They, however, made known to mankind the existence and the extent of the immense tract of land now known as the continent of North America.

SUBSEQUENT HISTORY OF CABOT.

We have little concern with the subsequent events of Cabot's life for the purposes of this history. It will be sufficient to say that, on his return to England, he found the country deeply disturbed by civil commotions, and the government were not in a condition to pay much attention to his plans. Besides, though he had explored a very extended line of coast, and though great advantages ultimately accrued to the English crown through the discoveries that he made, his expedition, on the whole, in respect to all the immediate results which the parties concerned had hoped to realize from it, had proved a failure. Cabot had not found a way to India, nor had he discovered any lands producing gold or silver, or gems, or spices, or any other means of suddenly enriching those who had originated the enterprise.

Cabot, however, acquired considerable renown

by these two voyages, and he continued afterward for many years to occupy a very commanding position in respect to the principal plans for exploring distant seas, in which different nations were then engaged. During this period he acted sometimes in the service of the king of England, and sometimes in that of the king of Spain. He made several long voyages himself, and during one of them he explored a large portion of the eastern coast of South America, where he founded colonies, and met with many extraordinary and interesting adventures, which it would, however, be out of place to relate particularly here.

On his return from these voyages he was advanced to positions of great dignity and honor under the governments both of England and of Spain—positions which gave him a controlling influence in respect to the organization and management of many of the great commercial enterprises of the day.

THE VOYAGE OF THE SERCHTHRIFT.

Cabot continued to take a great interest in these enterprises to the very close of his life. There is an account of his going down to Gravesend, near the mouth of the Thames, on the occasion of the departure of a vessel called the Serchthrift, which

was going on an exploring voyage into the seas to the northeastward of England, when he was about eighty years old, in order to manifest his interest in the expedition, and to bid those engaged in it farewell, and he joined in the festivities of the occasion so far as to take his place among the young people in a dance at an inn in the town, where he gave a sort of ball to the officers of the expedition and the damsels of the neighborhood.

The occurrence is related by the commander of the vessel, who kept a minute journal of the incidents and events of the voyage, in the following manner:

The 27th being Munday the Right worſhipfull Sebastian Cabota came aboord our pinneſse at Grauesend accompanied with divers Gentlemen and Gentlewomen, who, after that they had viewed our Pinneſse, and tasted of such cheere as we could make them aboord, they went on shore, giuing to our mariners right liberall rewards. And the good old Gentleman Master Cabota gaue to the poore moſt liberal almes, wiſhing them to pray for the good fortune and prosperous succeſs of the Serchthriſt our Pinneſse. And then at the signe of the Christopher hee and his friends banketted, and made me and them that were in the company great cheere; and for very ioy that he had to see the towardnes of our intended discouery he entred into the dance himselfe, amongſt the reſt of the young and luſty company, which being ended hee and his friends departed moſt gently, commending us to the gouernance of Almighty God.

Cabot died at last at a very advanced age and full of honors. He retained his interest in everything pertaining to navigation and discovery to the last, and on his death-bed, when his mind was wandering, he talked of voyages and proposed routes and distant seas. He said, moreover, that God had revealed to him a way of ascertaining the longitude easy and sure, but that he was forbidden to reveal it to any human being.

The latitude at sea was always very readily obtained, as the elevation of the sun at mid-day, or that of the north star at night, gives it almost directly; but how to ascertain the longitude was the great problem and perplexity of navigators in those times, and the question occupied the thoughts of every mathematician and astronomer, as well as of every vain and ignorant schemer, in the land. The difficulty in respect to longitude arose from the fact that, inasmuch as the whole sky, with the sun, the moon, and all the stars, are in a state of continual rotation from east to west—which is the way in which longitude is reckoned—there is no fixed point to observe in that direction, and no standard of measurement or comparison which any instrument that was in use among the navigators of those days could make the basis of its observations.

CHAPTER VI.

THE DISCOVERY OF FLORIDA.

When Columbus returned from his voyage and reported the results of it, the news spread rapidly throughout all the western part of Europe, and universal interest was awakened both among the governments and the people, in the new world which had thus been discovered. In the course of a few succeeding years a number of colonies were founded in the West India Islands, and in those portions of the continent lying contiguous to them, and various adventurers from among the higher classes of the population, especially from Spain and Portugal, came out with appointments to serve as governors, generals, secretaries, and in various other capacities, all expecting to make their fortunes out of the treasures of the new world, or to acquire renown by the exploits which they should perform in the conquest of it. This is not the place to relate in general the doings of these adventurers, as their exploits do not form directly a part of the history of our own country.

But there is one among them that must be at least alluded to, on account of the fact that the continent, when it came to be known that there was a continent, and that it was so far removed from the eastern shores of Asia that the name which Columbus had given to the lands which he had discovered —the Indies—could not properly be extended to it, was called by his name.

AMERICUS VESPUCIUS.

He was an Italian merchant, a native of Florence. The nature of his business led him to take a great interest in everything relating to commerce and navigation. In the course of his travels about Europe he came at length to Seville in Spain, and he was residing there when Columbus made his first voyage. He afterward made several voyages to the newly discovered regions himself, but the accounts of them that remain are confused and contradictory. He is accused of having falsified his journals by ante-dating some of his voyages, and of having claimed credit for some that he never made, in order to enhance his merit in the estimation of mankind as a great discoverer. At any rate, after his return from such expeditions as he really did make, he was appointed to the office of grand pilot, as it was termed, under the govern-

ment of Spain, which office gave him the charge of the preparation of charts for the use of navigators crossing the Atlantic, and of the distribution of them to the commanders of the ships. While in the exercise of the duties of this office, either he, or his friends for him, contrived that the new continent should be called by his name. They caused the name America to be inserted upon the charts, and this name soon became so firmly established that though many efforts at different times have been made to change it, none have succeeded. Nothing is more difficult than to change a name once widely disseminated among mankind.

Americus justified his calling the new continent by his name by claiming that he was the first who really discovered it—Columbus having, as he alleged, seen only islands until after he—that is Americus—had found his way to the main land. This claim is not generally allowed; and, at any rate, if Columbus was not the first to land upon the continent, that was a very trifling circumstance—one, in fact, of no moment whatever in estimating the degree of honor which should be awarded to him as the discoverer of the new world; and it seems to mankind very unjust that another should have the privilege of giving it his name, on grounds comparatively so trivial.

This is true, but, in fact, the injustice which has been done is more imaginary than real, for, after all, though Americus succeeded in giving the new continent his name, he obtained no glory, but rather censure and discredit by so doing. All the real and substantial honor of the discovery rests, in the opinion of mankind, and always will rest, with Columbus alone.

JOHN PONCE DE LEON AND THE FOUNTAIN OF YOUTH.

The first portion of the territory now belonging to the United States which was visited by the Spanish and Portuguese adventurers was the south-eastern portion, now forming the states of South Carolina, Georgia, and Florida. The shores of Florida were visited first by Ponce de Leon, who was at that time the governor of the island Porto Rico. The Spaniards who came to America at this time imagined themselves in the Indies, according to the ideas of Columbus, which still prevailed, and they entertained the most extravagant conceptions, not only of treasures to be discovered, but also of various magical wonders which they imagined the country to contain. It would almost seem that they had read the Arabian Nights Entertainments, and thought that they had found

a country in which all the gorgeous descriptions which that book contained were to be fully realized.

Ponce de Leon heard accounts from some of the Indians that at a considerable distance to the northward, on the main land, there was a magical spring, which was endowed with such powers that any one who should bathe in its waters would be restored to youth again. So he organized an expedition to go and find it. He did not find the spring, but he discovered and explored a considerable extent of country upon the main land, and named it Florida. This was in 1512, just twenty years after the first voyage of Columbus.

It has been said, and the idea is so agreeable that we are all predisposed to entertain it, that De Leon named the country Florida on account of the profusion of flowers with which the woods were adorned at the time that he visited it; but the truth is, probably, that he gave it that name from the circumstance that he first saw the land on Palm Sunday, a sacred day in the Catholic church, which, in the Spanish language, is called Pasqua Florida. It was a general custom with all these Spanish navigators to give to any place that they discovered the name of the saint or of the festival, which was associated, in the calendar, with the day on which they discovered it.

COMMENCEMENT OF HOSTILITIES WITH THE AMERICAN INDIANS.

The Spaniards who came from the old world in those days to make settlements in the new, brought with them sailors to man their ships, and soldiers to conquer the countries which they should discover, but they could not well bring a sufficient number of laborers to till the soil and work the mines, when they came to establish permanent colonies, and they adopted the system of compelling the natives to work for them, without paying them wages. This was the origin of the system of American slavery. It was from an attempt made by this same Ponce de Leon to carry off a cargo of Indians from South Carolina, in order to make slaves of them in his island of Porto Rico, that the first serious hostilities were excited between the Indians and the Europeans.

This circumstance occurred soon after Ponce de Leon's first voyage to Florida. A company was formed to work certain mines on the island of St. Domingo, now usually called Hayti, which lay directly to the west of Porto Rico. This company, of course with the sanction of the governor, sent off two vessels to the coasts of what is now South Carolina. They landed and opened an intercourse with the Indians, whom they found kind, gentle

and hospitable. After trading with them for some days, and gaining their confidence by a great show of friendliness and good-will, they invited them to come on board the vessels, and when there they invited them below, under pretense of showing them the interior arrangements. When the Indians were all below they suddenly clapped down the hatches and barred and bolted them, and then immediately made sail. The poor Indians, torn thus suddenly and treacherously from their families and homes, and borne away against their will, never returned. One of the ships foundered on the voyage to St. Domingo, and all on board perished. The other arrived, and the unhappy captives brought on board of her were compelled to pass the remainder of their lives in digging in the mines for the benefit of their captors.

The tidings of this outrageous crime spread rapidly, of course, among the tribes living along the neighboring coasts, and they awakened a feeling of universal indignation. Of course, all confidence in any professions of friendship which the Europeans might thenceforth make was gone, and in its place arose the fiercest resentment and rage, which on the next occasion of the landing of a company of Europeans on their shores led to acts of bitter retaliation and revenge. And thus it was

that the first hostilities with the American Indians arose.

THE FIRST ACT OF REVENGE.

It was not long before an opportunity occurred for the Indians to begin taking their revenge. One of the prominent members of the company that sent the expedition to kidnap the Indians on the main land was a certain personage named Lucas Vasquez d'Ayllon, who, when he heard the report brought back by the expedition, conceived the idea of taking possession of the country and making himself a sort of kingdom there. So he went to Spain and applied at court for a commission which should give him authority to do this, from the king and queen.

After several years of maneuvering and solicitation he at length obtained his commission, and returned to St. Domingo. There he fitted out an expedition, consisting of three vessels, and taking with him a proper supply of men and of military stores, he set sail. As soon as he reached the coast he entered St. Helena Sound, near where the town of Beaufort is now situated.* Here one of his vessels unfortunately went ashore and was

* See map at the commencement of the Eighth Chapter.

lost. With the other two he went a little further and landed. The Indians, who seem now to have thought that their turn was come to practice treachery, pretended to be very friendly. They engaged in traffic with the strangers at once, without manifesting any suspicion or fear, and in the end invited them to go a little way into the interior of the country to see their town. So completely was d'Ayllon deceived by their artifices that he allowed two hundred of his men to accept this invitation.

The Indians conducted the two hundred to the town, and there feasted and entertained them for two or three days. At first the men were somewhat wary and kept upon their guard, but in the course of the three days they gradually dismissed their apprehensions, and began at last to feel quite at home. On the night of the third day the Indians came upon them suddenly, under a preconcerted arrangement, and massacred them all as they lay asleep.

The Indians then immediately set off for the encampment of the expedition on the shore, where d'Ayllon himself and the rest of his company remained. They crept along in silence and secrecy through the woods, and at length, after pausing a moment on the outskirts of the encampment, to

make ready for a simultaneous assault, they suddenly burst upon the astonished Spaniards in their sleep, with terrific screams and yells, and with showers of darts and arrows. The Spaniards fled to their boats. The Indians pressed after them, beating them down by the way with tomahawks and war-clubs. Vast numbers were killed. The rest succeeded in getting off to their ships, and making their escape from the country. And this was the end of d'Ayllon's plan of making himself a kingdom on those southern shores.

NARVAEZ.

The next adventurer who undertook to make an incursion into the Florida country was a certain personage named Pamphilio de Narvaez. He had been engaged with the celebrated Hernando Cortez in various adventures further south, in Mexico, and had quarreled with him and been beaten by him in the contention, and he then went home to carry his complaints and accusations against his rival to the court of Spain. He did not obtain much satisfaction in respect to his alleged grievances, but at length, after seven years of intriguing, maneuvering and delay, he received from the king the appointment of viceroy or governor of Florida—that is to say, he was invested with authority to go and

conquer the country, establish over it the dominion of the king of Spain, and then exercise the dominion in the king's name.

He set off from Spain in the summer of 1527, thirty-five years after the first discovery of America by Columbus, and about ten or twelve years after the defeat of d'Ayllon, referred to under the preceding head. His expedition consisted of several ships, which contained about six hundred men, a considerable number of horses, and all necessary equipments and stores.

Narvaez was quite unfortunate in his voyage across the Atlantic, and also in approaching the shores of Cuba, where he stopped to refit before proceeding to his destination, having encountered a succession of terrible storms on the way, which, through the hardships which they entailed upon the crews, and the wrecking of one or two of his vessels which they caused, lost him a large number of his men. He finally sailed, however, for Cuba with those that remained, and at length, in April, 1528, nine months or more after leaving Spain, he found himself approaching the shores of Florida with about four hundred men and forty or fifty horses, at his disposal. Of course, there were several Spanish cavaliers and gentlemen in the company, who filled various subordinate offices

under Narvaez' command. Among these was one named Alva de Vaca—the secretary and paymaster of the expedition—who will be referred to particularly in the sequel.

THE LANDING.

Narvaez approached the shore on the western coast of Florida, near Tampa Bay. From the

MAP.

decks of the vessels, as soon as they came in view of the land, the natives could be seen assembled in

considerable numbers on the beach, gazing apparently in great astonishment at the little fleet, as it gradually came in. Their wigwams could be seen too, back at a little distance from the shore.

The landing took place on the following day. The Indians, however, did not wait to receive their visitors. When they found that they were coming on shore they abandoned their wigwams and fled into the woods.

The work of landing a considerable body of men, especially if they are accompanied by a troop of horse, on a wild coast, where, of course, there can be no facilities for debarkation, is a very slow and laborious process. It consumed in this case a large part of the day, but at length it was safely accomplished. The men and likewise the horses, which last were in a very lean and exhausted condition, were safely conveyed to the shore. As soon as they had landed Narvaez took formal possession of the territory as his kingdom, with appropriate ceremonies, and all the men under his command surrendered the commissions which they had held hitherto under the authority of the government of Spain, and received new ones, which Narvaez granted them in his own name, as the governor of the country in which they had landed. They thus, as it were, transferred their allegiance to him, and

recognized him as thenceforth their acknowledged ruler.

The next day some of the Indians who had fled to the woods began cautiously to come back again, one by one. Narvaez treated them kindly, and endeavored to communicate with them, with a hope of obtaining some information about the country; but he could not succeed at all, either in making himself understood, or in understanding them.

PLANS FOR ADVANCING INTO THE COUNTRY.

Narvaez was not particularly pleased with the aspect of the country immediately around him, and he determined to proceed to the northward and westward along the coast, in the hope of finding something more promising. He first, however, sent out explorers in various directions, some of whom on their return reported that the whole country bordering on the coast in the direction in which they were going was entirely impassable, being obstructed by innumerable bays and inlets setting in from the sea, and communicating with vast lagoons and stagnant pools filled with aquatic plants, while the land intervening between them consisted of swamps, marshes, cane-brakes, and impenetrable thickets.

Narvaez, accordingly, concluded that he would

go back further into the interior in his march, in hope of finding higher and drier land. In the mean time his ships were to proceed in the same direction by sea, keeping as near the coast as possible, and watching at the various points that they should pass for signals from him. Narvaez spent a fortnight in making the necessary preparations, but at length everything was ready, and he commenced his march on the first day of May.

PROGRESS OF THE MARCH.

Narvaez and his troop advanced very slowly—at a rate upon the average of not more than four miles a day—so difficult was the country, and so devious were the ways which they were compelled to pursue in order to avoid the swamps, and stagnant lakes, and the innumerable inlets coming in from the sea. They were obliged to keep constantly on the watch against enemies, too, for though the Indians seemed not to be strong enough openly to attack such a force as that which Narvaez commanded, they continually evinced an unfriendly disposition, and Narvaez could not ascertain positively what their views and intentions were, for he could not communicate with them. He had no interpreters; nor had he any other means of coming to an understanding with them.

The object which Narvaez had in view in this march was to find some great native kingdom or state to conquer and rule over, as Pizarro had done in Peru, and Cortez in Mexico. Accordingly, as he went on, he looked for a cultivated country, and for cities and towns, and indications of gold and silver. But he found nothing of the kind. The country presented to view only one continued succession of swamps and canebrakes, and entangled and impenetrable thickets. In many places where the soil appeared firm upon the surface, it would tremble and fluctuate under the tread for a great distance around, showing that the appearance of stability was illusive, and that the treacherous ground, covered with grass and herbage so green and beautiful above, was nothing but a slough of semi-fluid mire below. All these regions, too, swarmed with rattlesnakes, lizards, alligators, and many other hateful animals that breed in mud and slime.

There was a portion of upland country, it is true, and here were sometimes found fields of maize and of cotton, which were cultivated by the Indians. The swamps, too, produced in many places large quantities of wild rice, a very nutritious article of food. In the neighborhood of such grounds as these there were villages—if villages

they might be called—consisting of rude wigwams, inhabited by rude and savage men. In a word, Narvaez found none of the elements out of which the kingdom was to be constructed which his imagination had painted in such glowing colors when he set out from Spain. There were no great cities and towns like those which had been found in Mexico and Peru—no splendid palaces filled with treasures—no great kings and princes to be made captive—no gold, no spices, no gems—nothing but wretched huts, and around them squalid Indians, so low in their barbarism that they seemed to add fresh deformity to the dreary region of swamps and reptiles in the midst of which they lived.

Narvaez went on, hoping to find something more attractive as he advanced, but still greatly vexed and disappointed, and in a very unamiable state of mind.

CROSSING THE SUWANEE RIVER.

At last, about the middle of June, he arrived on the banks of the Suwanee River. He had gone so far into the interior that he came upon this river at a considerable distance from its mouth, but still the stream was wide and the current was rapid, and he encountered considerable difficulty in trans-

porting his men and animals across it. Indeed, one horse was borne down by the current, with his rider upon his back, and both were drowned. The remainder of his force, however, passed the river in safety, and Narvaez now entered a region of country which was somewhat more favorable for the occupation of man, and where he hoped he should at length find cities and towns and a more wealthy population. Instead of which, however, he only found more numerous enemies to encounter, and a fiercer and more determined resistance.

Still the Indians would not meet him in the open field. They contented themselves with following his steps, sometimes making false treaties of peace with them, for by this time he had learned to hold some communication with them, sometimes drawing him into ambuscades, and sometimes contenting themselves with harassing his march, and picking off his men with their arrows from thickets in which they lay concealed while the column of troops was passing.

THE BLOODHOUNDS.

Among the other means of warfare against the Indians which Narvaez brought with him was a supply of bloodhounds. All the Spanish generals made great use of bloodhounds in their contests

with the natives of these countries. These dogs, when used thus against human beings, are trained to follow the scent of man, and in doing their work they become as ferocious and as terrible as tigers. They are very large, being more than two feet high, and extremely swift of foot. When once put upon the track of a fugitive they never lose the scent, and so fierce are they for blood that often they can neither be called, nor pulled, nor beaten off, when once they have seized their victim, until they have killed and half devoured him.

Narvaez not only used these bloodhounds to pursue and capture Indians on his march, but he sometimes, as was the custom with other Spanish commanders, used them as executioners to carry into effect a sentence deliberately pronounced upon a captive.

In one case, for example, he became very much displeased with a certain chief named Hirrihigua, who made a sort of treaty of peace with him, as Narvaez understood it, soon after he crossed the Suwanee. Afterward Narvaez became so incensed with something which Hirrihigua had done, that he ordered his nose to be cut off, and then brought out his mother and set the bloodhounds upon her. The bloodhounds sprang upon her with the utmost fury, like wild beasts upon their prey. They

seized her by the throat, killed her immediately, and then tore her to pieces and devoured her.

THE EXECUTIONERS.

INCREASING DIFFICULTIES.

These and similar atrocities perpetrated by Narvaez on his advance into the country beyond the Suwanee exasperated the minds of the Indians to

the last degree. The tribes made common cause against him, and endeavored to harrass and impede his march in every possible way. There were no roads, and though the expedition had now passed in some degree beyond the region of the swamps and everglades, they found instead interminable forests, which were everywhere so encumbered with fallen trees and dense undergrowth, that the labor was immense of cutting a way through them. Both men and horses began to suffer now a great deal for want of food, for Narvaez had brought no provisions with him except a two days' supply at the commencement of his march. He had trusted to the resources of the country, which he had expected to find populous and wealthy like the kingdoms of Mexico and Peru. The horses began to give out. The men, too, suffered so much from hunger, that when a horse could march no further they slaughtered him for food. At last they were reduced to such short allowance that for two or three weeks they lived mainly upon roots and other esculent substances which they found in the woods. They made great use for this purpose, it is said, of certain tender leaves that grew upon the palmetto tree. They made every possible effort to induce the Indians to supply them with food, but without any success.

ARRIVAL AT APALACHE.

They pressed on, however, notwithstanding all these difficulties, being cheered by the intelligence that there was a town at some distance before them, called Apalache. If they could reach that town they hoped to procure there all that they required. Great was their disappointment, however, when at last they reached it, to find that it consisted of a miserable Indian hamlet of about forty wigwams, forsaken and desolate, and wholly devoid of every thing that could supply their wants or minister to their comfort, except to furnish them a scanty and cheerless shelter from the winds and rain. The inhabitants had abandoned their dwellings and fled, when they learned that the invaders were approaching.

There were, however, some fields of corn growing near, the ears in which were beginning to get ripe, thus promising a moderate supply of food. Narvaez established himself in the deserted village, and though he was attacked two or three times by the Indians who still lurked in the neighborhood, he remained there for nearly a month, resting and recruiting his men, and seeking information from every quarter, in order to obtain some light, if possible, to aid him in determining what course to pursue.

NARVAEZ TURNS HIS COURSE TOWARDS THE SEA.

After making diligent inquiry in every direction, both by sending out scouts and explorers to examine the neighboring country, and by closely questioning every Indian that he could lay hands upon, he learned that the country before and around him was little else than one vast solitude, filled with great lakes and almost impenetrable forests. The land was very little occupied. The people were few and scattered, and, what was worse, extremely poor. There was no place in all the region so large as Apalache. The sea lay to the southward, and was about nine days' journey distant. He learned, moreover, that there was a town called Aute lying in that direction, the inhabitants of which were pretty well supplied with the common food of the country, which consisted of maize, beans, pumpkins, and fish.

Narvaez determined to turn to the southward. He would go to Aute at any rate, and there consider whether to proceed onward to the sea. He accordingly put his army in motion again, but he found the difficulties of the way greater than ever. Immense bodies of water lay spread over the country in every direction, and often the horses—the few that were left—and the men, were compelled to

wade for long distances through these marshes and lagoons. The Indians of the country watched them as they passed, lying in wait for them in every thicket, and shooting at them with their arrows from behind logs and trees. In this manner many of the men were killed, and still more were wounded, while the Indians almost always escaped with impunity.

This march continued for nine days, and at the end of that time the expedition arrived at Aute. They found the village deserted, for all the inhabitants had fled at their approach. But there were large corn-fields growing near, with corn nearly ripe, and pumpkins and beans in abundance. Thus, for the moment, the almost famished soldiers were once more supplied with food.

NARVAEZ DISCOURAGED.

Narvaez was now, however, becoming effectually discouraged. The rich and powerful kingdom which he had hoped to discover and to conquer, and which his imagination had painted in such glowing colors, had entirely disappeared from his view, and was replaced by a dismal picture of swamps, quagmires, desolation and poverty, covering the whole land. He had now been six months journeying through the country, and the prospect,

instead of growing brighter, seemed to become darker and more discouraging every day. Slowly, reluctantly, and with many desperate internal struggles against his inevitable fate, he determined to make his way to the sea—if, indeed, there should prove to be still strength left in his exhausted men to accomplish the rest of the journey—in hopes that he should there find the ships that he had sent along the shore, or at least learn some tidings of them. He did not yet entirely abandon all hope, for if he had found the ships he intended to continue his researches some distance further to the west, by coasting along the shore, in hopes of finding some possible chance for making a new attempt to land.

BOAT BUILDING ON THE SEA SHORE.

The sequel of this melancholy story is soon told. After toiling on for some days longer, Narvaez at length reached the sea, but nothing was to be seen or heard of the ships. Narvaez now found his condition really desperate. The men were too much exhausted by hunger, sickness and fatigue, to move any further. They were, besides, growing insubordinate and mutinous, and his authority over them for any other purpose than that of contriving and executing some plan for leaving the country

was gone. He determined therefore to undertake the work of building boats, in order to coast along the shore in them, in hopes to find the missing vessels, and perhaps, in the last resort, to attempt to make his way to Cuba.

But how to build these boats was the difficulty, for he had neither mechanics nor tools for the work, nor even any suitable materials.

While he was pondering the difficulties by which he was thus surrounded, one of his men came to him in his perplexity and said that if a blacksmith's forge was necessary for the work he thought he could assist in making one, by contriving something that would serve for bellows. He could make pipes out of reeds, he said, and attach to them a bag formed of the skin of a deer, to contain the wind. This plan was at once carried into effect. A forge was made, and immediately the most ingenious of the men were set to work converting all articles in their possession that were made of iron into boat-building tools. Stirrups, spurs, cross-bows, swords, and everything else of the kind that could be spared, were heated in the forge, and converted into saws, chisels, axes, and other such tools. The smaller articles were fashioned into nails, and the work of building the boats was commenced. Timber and planks were ob-

tained from the neighboring woods. A substitute for oakum was made from the bark of the palmetto tree, while the pine furnished pitch for covering the seams. The men made ropes of the hair taken from the manes and tails of the horses—the horses themselves being one after another killed for food—and they ripped their shirts to pieces to get cloth for the sails.

The men were all so eager to make their escape from the country that they worked upon the boats with the utmost diligence, and in little more than a fortnight they had finished five. All this time they lived in a great measure upon oysters, which a portion of the company, detached for this purpose, dug on the adjoining shores. The work of procuring these oysters was, however, very dangerous, for Indians were lying in ambush all the time in the adjoining thickets ready to shoot at every one whom they should find at any distance from the camp, and in the course of the fortnight they killed ten.

The boats were about thirty feet long. There were two hundred and eighty men to embark in them. These were all that remained of the four hundred that had landed in the country about six months before. This number divided among the boats, in addition to the necessary stores, over-

loaded them to such a degree that when they were all on board and were ready to set sail, the gunwales were but seven or eight inches out of the water.

END OF THE EXPEDITION.

In this condition, when all were ready, the boats put off from the shore. Of course, it would have been certain destruction to expose such embarkations as these to the open sea, and so the little fleet was kept in smooth water inside the reefs and sandbars and low islands which here line the coast. They steered for the westward, supposing that the vessels had gone on in that direction. The line of boats crept thus slowly along the shore, with a terrible danger threatening them on either hand. Seaward, just outside the range of reefs and sandbars, they could see the white crests of the seas rolling in and threatening to overwhelm them, while along the margin of the land every thicket concealed a party of exasperated and merciless enemies thirsting for their blood. Between these two lines of danger there was but a narrow way along which they could pass, so as to be safe from the surf on one side and beyond the range of the arrows on the other.

They went on in this way, growing weaker and

weaker, and suffering more and more every day, for a month. One thing favored them, it is true. They succeeded in capturing one or two Indian canoes, by which means they were enabled to divide and so lighten their loads. They often landed, in their desperation, to seek for food, sometimes attacking an Indian village to procure it. On one such occasion they were beaten off by the Indians, and Narvaez was struck in the face by a stone and very seriously wounded.

At last one night, as they were toiling despairingly on, in the vicinity, it is supposed, of where the town of Pensacola now stands, being reduced almost to the last extreme of destitution and suffering, a storm came up, with the wind blowing off the land. The men were lying almost lifeless in the boats, many of them too weak to lift an oar. Narvaez saw now that the end had come. He told his officers and men that the time had arrived for each one to take care of himself. He released them from their duty to him, wished them success in the endeavors which any of them might make to save their lives, and bade them farewell.

The boats were scattered by the storm, and all but one was driven to sea and lost. One succeeded in reaching the shore, or was driven upon it at some projecting point. The men on board of

this boat were almost lifeless. The Indians, finding them in this piteous condition, had compassion upon them, took them to their wigwams, and restored them to life.

One of the men thus saved was Alva de Vaca, the secretary and paymaster of the expedition, before referred to. He was carried back into the interior, and remained a captive in the Indian country for *eight* years. In the course of that time he was transferred from tribe to tribe, and conveyed from one territory to another, first across the Mississippi and then on further to the west, until he had traversed the whole continent, and reached California, where at length he found a Spanish ship, in which he embarked, and in due time arrived in Spain. He was received on his return as one that had risen from the dead.

This De Vaca wrote and published an account of the expedition of Narvaez, and of his own adventures after his escape, and it is from this narrative that the facts related in this chapter have been derived.

CHAPTER VII.

FERNANDO DE SOTO.

COMMENCEMENT OF DE SOTO'S CAREER.

FERNANDO DE SOTO is immortalized in history as the discoverer of the Mississippi River. It is true that De Vaca, the officer who was saved from the expedition of Narvaez, and afterward traversed the country to California, must have crossed the Mississippi, and some persons have thought that Narvaez himself, in his boats, reached the mouth of that river before the boats were lost. But this is not certain. At any rate De Soto was the first to explore any considerable portion of the stream, and to make its existence effectually known to mankind.

De Soto was a Spanish general, and he first attracted attention in his day by various exploits which he performed in Nicaragua and Peru, in connection with the famous Pizarro. Indeed, he was for a time Pizarro's second in command, but being dissatisfied with the portion of the spoil which fell to his share in Peru, although, in fact,

the share which he received was so great that he was enormously enriched by it, he determined to undertake an enterprise on his own account. After long revolving the subject in his mind, the plan on which he finally settled was to repeat the attempt in which Narvaez had so signally failed, as related in the last chapter, namely, that of making the conquest of Florida and establishing a kingdom there.

The term Florida, in those days, was not restricted in its application to the present limits of the state of Florida, but was applied indefinitely to the whole region in that quarter of the continent which had been or was to be discovered.

Since the attempt of Narvaez ten years had now elapsed, and no one had thus far seemed disposed to repeat the undertaking which had terminated so disastrously for him. Narvaez had penetrated but very little way into the interior, and, therefore, very little was yet known of the country except the mere aspect of the shore. De Soto imagined that at some distance within there might exist cities and towns, and cultivated fields, and a semi-civilized people possessed of vast treasures of gold and silver, such as had been found so abundant in Mexico and Peru. This was indeed the prevailing idea among these adventurers in respect to all the

regions of Central America, excepting so far as they had been explored, and no information had yet been received in relation to Florida and the adjacent countries which was calculated to dispel these agreeable illusions.

OUTFIT OF DE SOTO'S EXPEDITION.

As soon as De Soto received his commission from the king of Spain, and the nature of the enterprise which he proposed to undertake was made known, a great number of volunteers offered to join him, among whom were many gentlemen of birth and education. These persons were attracted by the hopes of wealth and fame which they were to acquire in carrying out the undertaking, and they had great confidence in De Soto as a commander. Besides the advantage that he possessed in his abundant wealth, which enabled him to fit out his expedition in the most perfect manner, he was personally a man of great energy of character, and also of extraordinary physical strength and power of endurance. Indeed, he was in every respect well fitted to be placed at the head of such an undertaking.

He sailed from Spain in the month of April, 1538, with a fleet of ten ships and an army of a thousand men.

DIFFICULTIES AT THE OUTSET.

In company with De Soto's ships there were to go out several other vessels destined for Mexico. The commander of this Mexican fleet was a certain Gonzalo de Salazar, but during the voyage across the Atlantic the whole squadron was to be under the general command of De Soto. De Salazar was not very much pleased to be thus put under De Soto's orders, even for a time, and soon after the voyage was commenced—on the first night, in fact, after the ships had put to sea—he pressed on in advance of the whole fleet—his vessel having been, it seems, the best sailer—thus taking precedence of his superior officer, in violation of all the rules of naval etiquette. De Soto made signals for him to fall back, but when he found that De Salazar did not regard them he fired upon him twice in quick succession. The first shot passed just over the deck of Salazar's vessel, raking it from the stern to the bow, cutting through the sails in its course, and damaging the masts and rigging. The second shot struck the hull of the ship, and carried away all the bulwarks on one side. The ship was thus completely disabled, and as De Soto's ship was coming up close behind at full speed the two vessels came into collision, and

the rigging became entangled. De Soto's men, by his orders, sprang to the yards and cut away the rigging of Salazar's vessel and thus cleared his own ship, leaving the other more damaged than ever.

De Soto immediately afterward brought Salazar to trial for his insubordination and disobedience, and was greatly inclined to cut off his head; but upon Salazar's making full submission and begging for his life, with many promises of good behavior in future, he finally pardoned him.

ARRIVAL ON THE COAST OF FLORIDA.

The voyage across the Atlantic was made in safety. The fleet repaired first to the port of Santiago in the island of Cuba. De Soto remained in Cuba for some time, and engaged in various enterprises, and met with various adventures there, which can not be here described. He, however, at length set sail for the coast of Florida, where he soon arrived in safety; but the voyage across the Atlantic had occupied so much time, and the delay which he had experienced at the island of Cuba had been so great, that it was more than a year after he embarked from Spain before he reached his ultimate destination. He arrived in sight of land about the middle of May, 1539. He cruised

along the coast for a few days, until at length he entered a bay, supposed to be the one now called Tampa bay, but which he, in accordance with the spirit of religious pretension on which the popularity of these expeditions in Spain greatly depended, called the bay of the Holy Ghost. He immediately made arrangements for landing, and succeeded in putting about three hundred men on shore that night.

The landing party watched all the time very closely for Indians, but they did not see any that night, and De Soto began to think that all was safe, and that he should be able to effect the landing of his whole force before any should appear.

But though the Spaniards had not seen any of the natives, the natives had seen them, and had intentionally kept out of sight themselves, for the purpose of putting the strangers off their guard, intending to surprise and attack them as soon as a favorable moment should arrive.

Accordingly, the next morning, just before day, when De Soto's men were all asleep in their encampment, the Indians made a sudden irruption upon them, terrifying the men with vociferations and yells of the most frightful character, and overwhelming them with a shower of darts and javelins. As this was the first experience which De

Soto's troops had had of such an attack, they were thrown into a panic, and they fled precipitately down to the beach. The alarm was soon communicated to the ships, and assistance was sent to the men on shore, and finally the Indians were driven off. De Soto himself, however, narrowly escaped being killed. His horse was killed under him by an arrow, which came with such force that it penetrated through the covering of the saddle, and entered seven or eight inches into the animal's body.

The Indians now fled, leaving the way clear to the invaders to advance. De Soto accordingly, after landing all his forces, marched with them about two miles into the interior, and took possession of a village of wigwams which the occupants had abandoned on his approach.

DE SOTO OBTAINS AN INTERPRETER.

At the time when Narvaez made his invasion of Florida, as related in the last chapter, one of his men, named John Ortiz, had been captured by the Indians and taken into the interior of the country, where he had been saved from death by the wife of a chieftain, and had afterward been taken as a slave by another chieftain, with whom he had lived since that time. His master had kept him in close

subjection, and had employed him in various servile labors, but had in other respects used him well.

The name of this chieftain was Mucozo, which, being interpreted, means the Little Bear. When he heard that a party of white men had landed on the coast, he determined to send a delegation down to meet them and to offer peace. So he organized a troop of eighty Indians, and putting John Ortiz at the head of them sent them forth.

In the mean time De Soto had heard that Ortiz was still alive, and had learned in some way where he was, and he determined to send for him. So he sent off a detachment of sixty horsemen, under the command of a proper officer, to proceed to Little Bear's village and find Ortiz if he could, and bring him in to the camp. The Indian troop sent by Little Bear and the squadron of horse sent by De Soto met each other on the way.

The Indians were terrified at the sight of the horses and fled, advising Ortiz to fly with them. He, however, would not do so, but stood his ground until the Spaniards came up.

Now Ortiz had been so long in the Indian country that he had well nigh forgotton his own language, and being dressed like the Indians, or rather being, like them, not dressed at all, for

they wore nothing but feathers in their hair and a very simple garment about the loins—he was not to be distinguished from one of the savages. And the Spaniards being greatly excited at the sight of the Indians, rushed on toward them as soon as they saw them with so much impetuosity, in spite of all the efforts of their commander to restrain them, that Ortiz would have been run over and killed if he had not had the presence of mind to make the sign of the cross. He did this by holding up his bow and placing his arm across it near one end. This signal arrested the attention of the foremost of the troop, so that they wheeled their horses in time to save him.

They immediately asked him if he was John Ortiz, and on his answering that he was, one of them took him up behind him on his horse, and the whole troop returned with him to De Soto's camp.

THE STORY OF ORTIZ.

The account which Ortiz gave of himself, when he had so far recovered his recollection of his mother tongue as to be able to tell his story, was quite singular. He said that he came to the country with the expedition of Narvaez ten years before. He did not land with the other

troops, but remained with those who were left on board the vessels, in order that they might navigate them along the coast. This party had orders to watch at every place where they could approach the shore for signals from the land party, and on one occasion, when they approached the land in this way, they saw a company of Indians on the beach, making signals for them to come on shore. This the commander of the ships at first refused to do, but the Indians produced something white which had the appearance of a letter, and after waving it in the air so as to call the attention of those on board the vessels to it, they put it into a cleft at the end of a reed, and set the reed up in the sand on the beach. They then withdrew into the thickets.

The captain thought that the paper must be a letter from the party on the land, and that it had been given to the Indians to deliver to those on board the ships, and he finally concluded to send a boat on shore to get it. Four persons went in this boat, and among them was Ortiz himself. Ortiz was then a young man of about eighteen years of age.

The moment that the four boatmen set foot upon the beach the Indians rushed down out of the thickets, made them all prisoners, and carried

them into the interior to Hirrihigua, the chieftain whose mother Narvaez had caused to be devoured by bloodhounds. It seems that the Indians had been sent by Hirrihigua to make the capture, in order that he might have the means of revenging the brutal outrage which his family had suffered.

Accordingly, after keeping the prisoners for a short time, to exhibit them in the neighborhood and exult over them, he brought them out one after another into an inclosure arranged for the purpose, and exposed them there to be shot at with arrows and javelins by any of the tribe that chose to join in the work, until they were dead.

When three of them had been disposed of in this way, and the turn of Ortiz came, two of the women—the wife and daughter of the chief—were moved to pity by his youthful appearance, and begged for his life. "This is only a boy," said they. "Do not kill him." Their intercessions prevailed. Ortiz was spared, and soon afterward he made his escape from Hirrihigua to another chieftain, who received and protected him, and kept him in his household from that day forward as a slave.

PREPARATIONS FOR THE CAMPAIGN.

De Soto remained three or four weeks at his

encampment near the bay, in order to rest and recruit his men and his horses after their voyage, and also to make preparations for his proposed campaign in the interior. He made diligent effort to open communications with the chiefs of the tribes inhabiting that neighborhood, in order to obtain intelligence in respect to the country. Ortiz could give him very little information, as he had been kept closely confined in one place during his captivity, and had been employed wholly in menial occupations. He, however, rendered good service as an interpreter.

De Soto was not very successful in cultivating a good understanding with the chiefs. They had had too much experience of the treachery and cruelty of the Spaniards in the visits which former adventurers had paid them to place any confidence in his promises, and though they sometimes pretended to be friendly, their real wish was to trammel the movements of the hated invaders in every possible way, and in the end either to eject them from the country or destroy them. The consequence was that skirmishes and fights were continually breaking out between the Spaniards and the Indians, by which the former were much harassed. The great aim of the Indians was to draw

their enemies into ambuscades, or into the swamps, where their horses would sink into the mire.

THE ADVENTURE OF VASCO PORCALLO.

One of De Soto's lieutenants, named Vasco Porcallo, met with an adventure which nearly cost him his life, and entirely discouraged him from proceeding with the expedition. He went out one day at the head of a detachment to attack a party of Indians. The Indians fled into a swamp. Porcallo ordered his men to follow them. The men hung back, and Porcallo, to set them a good example, rode on upon the soft ground, where soon his horse began to sink, and finally went in all over, carrying his rider with him. With infinite difficulty Porcallo was at last extricated, though not until he had been nearly suffocated in the mire.

He was a man somewhat advanced in life, and had joined De Soto's expedition with the idea that he was coming to a rich and cultivated country like Mexico and Peru. But this adventure, taken in connection with the general aspect which the enterprise was now beginning to present, determined him to leave the work to younger men. So he distributed his arms, his horses, and the various accoutrements and appointments which he had pro-

vided for the campaign among the officers, and went again on board his ship to return with it to Spain.

DISPOSITION OF THE FLEET.

As for De Soto, his resolution still remained firm. He was very confident that by going far enough into the interior he should find the rich and fertile country which he sought. Narvaez had, after all, only followed the line of the coast in the expedition which he had made, and his failure was therefore no proof that there might not be a populous kingdom and a wealthy capital further in the interior. In Mexico, the capital, and the richest part of the country, had been found at a great distance from the sea. So he determined to send away the ships, in order that his men might dismiss from their minds all idea of escaping by means of them in case of a reverse. He accordingly landed all the provisions and military stores, and then, reserving four vessels for such naval operations as he might wish to undertake upon the coast, he sent the rest away.

COMMENCEMENT OF THE MARCH INTO THE INTERIOR.

At length the day arrived for the expedition to commence its march. A small force was left be-

hind in a sort of fort which was built upon the shore. This force was designed to guard the four vessels, and also to protect a reserve of provisions which was to be left in the fort. The remainder of the troop, horsemen and footmen, with officers splendidly mounted and caparisoned, were marshaled in marching array, and when all was ready the commander gave the order to advance, and they began to move on. The train extended a long distance, comprising, as it did, an army of about a thousand men. Pioneers went before to open a way, and trains conveying artillery, provisions and baggage, followed in the rear. Among the other means which had been provided for the accomplishment of the objects of the expedition was an ample supply of blood-hounds, to hunt the Indians out of their swamps and hiding places, and also a company of twenty or thirty priests and monks, to assist in converting them to Christianity!

HARDSHIPS AND DIFFICULTIES OF THE MARCH.

It would require a volume to relate all the incidents and adventures which are described by the Spanish historians as having befel the army of De Soto in the course of the summer. The advance of such a body of men through such a country, where, of course, the roads and bridges were all to

be made, was necessarily extremely slow. The Indians were everywhere hostile, so that the progress of the expedition was almost a continual battle rather than a march, and the hardships which the men endured were greatly aggravated by the difficulties of the way.

Of course, De Soto had no knowledge of the geography of the country, except what he could obtain by his scouts and explorers, or extort from his Indian captives. Some of these last he compelled to serve as guides. They pretended to guide him, but led him into morasses and impenetrable thickets. De Soto thought they did this purposely, and to teach the rest a lesson, he gave up the first set of guides to the blood-hounds, to be torn to pieces and devoured. The next set, he said, brought him to clearer land.

Sometimes a party of Indians, after being defeated in a battle, would be driven into a swamp or stagnant lake, where they would remain for hours in the water and slime, the Spaniards firing at them all the time, and summoning them to come out and surrender. A story is told of a party that remained in such a condition at one time from ten o'clock in the morning until night, half concealed in sedges and reeds, and shooting arrows all the time at their assailants, who stood surrounding

them, in the outskirts of the swamp, on the hard ground. In order to furnish a stand-point for the one who was to shoot, four of those who were in the water would put their shoulders together, and a fifth would climb up and stand upon them long enough to discharge the arrow, and then plunge down into the water again. For some reason or other the Spaniards wished to capture these men, and not to kill them, and so they only fired over their heads, and kept guard all around the lake, making signs to them continually to surrender. The Indians, however, refused absolutely to do so, and remained in the water until they were entirely exhausted. Their bodies became swollen to a frightful degree. The Spaniards at last, finding them entirely helpless, swam out and pulled them to the shore by the hair. In swimming out to them they took their swords with them in their mouths, to kill them if they should attempt to resist, but the poor wretches were so far gone that they could do nothing, and so were dragged in an almost lifeless condition to the shore.

INTENSE HOSTILITY OF THE INDIANS.

In this manner, and with a continual recurrence of scenes like these, the vast train of the army slowly advanced through the country, moving at

an average rate of only a few miles a day. De Soto took a course leading further into the interior than Narvaez had done, but the general direction of his march was the same, that is, toward the northward. He everywhere endeavored to open negotiations with the Indians, and to establish amicable relations with them, by friendly pretensions and specious promises; but he found them, almost without exception, implacably hostile to him. They either refused at once to listen to any proposals for peace, or if they seemed sometimes for a moment inclined to accept them, it was only to gain some advantage by putting the Spaniards off their guard, or drawing them into an ambuscade, or betraying them in some other way.

One of the chiefs to whom De Soto sent proposals replied in bitter reproaches in language like this:

"We have had experience of such people as you before. Others of your accursed race have come in years past to poison the peace and happiness of our country, and they have taught us what you are. You are a set of vagabonds, whose vocation it is to wander about from land to land, to rob the weak, to betray those that trust in you, to murder the defenseless in cold blood and without provoca-

tion. No. We want no peace and no friendship with such marauders as you. War—never ending and exterminating war is what you will meet with at our hands. I have sworn not to cease from the conflict so long as a single white man remains in the land. So come on! robbers and murderers as ye are! We are ready to meet you, either in open battle or by stratagem, ambuscade and midnight surprises, and every prisoner we make we will hang upon the trees along the roadside."

The Indians acted everywhere in accordance with this spirit. So fierce was the resentment that had been awakened in their minds by the cruelties which had been committed by former parties of invaders, and which it was very evident that this new company was quite ready to repeat, that they hovered everywhere in ambuscade on the flanks of the army as it marched, concealing themselves in every thicket and on the banks of every stream, and shot down without mercy all that they could reach with their javelins or their arrows. They were not satisfied even with killing the hated intruders, for they dug up the bodies of the dead from the graves in which their comrades buried them, in order to cut them into quarters and hang the dissevered members on the trees.

PROGRESS OF THE EXPEDITION.

De Soto continued his march to the northward during the first summer, and made his winter quarters during the season of 1538–9 at a place which he called Anhayca, which is supposed to have been near where the city of Tallahassee now stands.* In the following spring he turned his course more decidedly into the interior of the country, taking a northeasterly direction, which at last brought him to the Savannah River, at a point quite distant from its mouth. His winter quarters here were at a place which he called Cofachiqui. He had come to this place in hopes of finding mines of gold and silver here, having received information to that effect from some of his Indian guides. When he arrived, however, he found no gold or silver, nor any indications that there were any known mines near. He remained in that region during the winter—this was the winter of 1539–40. In the spring of 1540 he put his troops in motion again, to continue his exploration. He now, however, turned his course and took a northwesterly direction, one which would lead him still further into the interior of the country.

* See map at the commencement of the next chapter.

Although De Soto had been greatly disappointed at not finding the gold and silver which he had hoped for on the banks of the Savannah, his prospects, on the whole, soon after this time began to grow somewhat brighter. The country became more open, and there were more frequent marks of cultivation. The native population, too, was now more numerous; the villages and towns—if towns they might be called—were more frequent, and the conveniences and comforts which they contained for the use of the troops occupying them were more considerable. In all his conflicts with the Indians he had been successful, and he had made a vast number of prisoners. These he had impressed into his service as laborers. He employed them to carry the baggage of his troops, and otherwise to aid in the labors attendant upon such a march. He had in the end several thousand of these captives in his train.

THE CAPTIVE PRINCESS.

Sometimes De Soto was received ostensibly in a friendly manner by the chiefs through whose country he passed, and in such cases he would often, in continuing his march, take the chief with him, nominally as a guest, but really as a prisoner. With the chief there were usually taken a large

number of the people of the tribe, who were employed as bearers of burdens in the manner above described; and one object of requiring the chief to join the army, too, in such cases was that his presence might make the men more contented, and that he might aid the commander in arranging and managing them.

At one time De Soto was received by a tribe whose chief was a female. The historians of this march, who usually described these scenes in very glowing colors, for effect at home, and gave every thing a grand and romantic name, called her a princess. Whatever may have been her proper title she evidently was possessed of great influence in her tribe, and De Soto determined to take her with him on his march to the westward. She dissembled her real feelings and made no objection to going. De Soto made arrangements to have her conveyed upon a sort of palanquin, or rather litter, made, in the Indian fashion, with poles and mats. Upon this vehicle she was conveyed by bearers, being attended also by a guard, nominally one of honor, but really of safety, to prevent her escape.

Things went on in this way very prosperously until the army reached the frontier of the princess' dominions, and then suddenly, watching her opportunity when her keepers were off their guard, she

leaped in an instant from the litter, and before the Spaniards who had her in charge could recover from their astonishment they saw her flying

ESCAPE OF THE CAPTIVE PRINCESS.

through the forest like a deer, followed by two or three faithful attendants whom she had contrived

to initiate into her plans. Pursuit was obviously useless, and the fugitive was never recovered.

TUSCALOOSA.

Marching slowly on in this way, in the summer of 1540 De Soto came to the river Coosa, the banks of which were very fertile and beautiful, and were inhabited by a very powerful tribe, the chief of which was named Tuscaloosa. De Soto had contrived, soon after entering the valley, to get Tuscaloosa into his hands, and he was now conducting him—half captive and half guest—together with other chieftains similarly situated, who were following in the train of the army, down the river toward Tuscaloosa's capital, a town called Mauvila.

APPROACH TO MAUVILA.

Mauvila, it seems, was quite a considerable town. It contained eight or ten large lodges, each of which was intended for the accommodation of several families. These lodges were quite substantially built, and were covered with thatch. The town was surrounded by an inclosure of stout palisades, consisting of strong posts set firmly into the ground, close together, with loopholes at regular intervals for arrows, and openings for gates on

the different sides. In fact, the place was the most important Indian stronghold in all that region.

Tuscaloosa and the other Indians who accompanied De Soto on his march down the river pretended to go with him willingly, and to be on perfectly friendly terms with him. They described to De Soto the situation and strength of the town, and though it was not large enough to allow of the whole army being quartered within the walls, the officers and their personal attendants, they said, together with the most valuable of the baggage, might be taken inside, while the main body of the troops might encamp near by.

This arrangement it was concluded to carry into effect, and the troops moved on, immense numbers of apparently friendly Indians accompanying and following them down the Coosa river to its junction with the Alabama river, and thence down the Alabama toward the town.*

A column of several thousand men is usually separated into several divisions, in advancing through a country not hostile, the divisions marching at some little distance from each other. In this case a large body of Indian burden-bearers,

* See map at the commencement of the next chapter.

loaded with provisions and military stores, and accompanied by a suitable escort, went on in advance, with orders to enter the town when they arrived, and store the baggage in the lodges within. At a short distance behind them came De Soto, with a body of one hundred foot and one hundred horse. Next came more Indians. The remainder of the army, consisting of about seven or eight hundred men, were left to come on by easy marches, as it was not necessary that they should reach the town until the baggage and the vanguard had been disposed of there, and a place of encampment chosen and made ready for the rest.

As the army went on in this way down the valley, and began to draw near the town, De Soto observed certain mysterious movements among the Indians, which excited his suspicions in some degree, but he did not pay much attention to them. Perhaps, situated as he was, there was nothing that he could do effectually to guard against treachery, if treachery were intended. He marched on at the head of his two hundred men until he reached the gates of the town. The Indian bearers had arrived before, and all the baggage had been taken in. As he advanced toward the gates every thing seemed quiet, and he supposed that all was well.

TERRIBLE REVERSE AT MAUVILA.

As soon as De Soto and his troops arrived, the horsemen dismounted, unsaddled the horses, and tied them to the trees. De Soto and his immediate attendants entered the town. The infantry stacked their arms, and the soldiers began to wander about the place, examining the fortifications and such other objects as attracted their attention, when suddenly, at the moment when the whole body were most completely off their guard, there arose one wild and unearthly yell, both from within and without the town, and from the margin of the woods environing it, and the whole body of Indians, who had been so quiet and apparently so harmless a moment before, became transformed in an instant to ferocious combatants, all in a perfect frenzy of rage. Men armed with arrows and javelins seemed to spring up out of the ground. Multitudes poured in from the neighboring thickets, and multitudes more sprang up from hiding places within the town, where they had lain concealed. The Spaniards rushed to their horses and to their arms. Before they could get possession of them, however, forty of the horses were killed, and also great numbers of the men.

It would be impossible to describe the scene of

terror, confusion, and slaughter which followed. De Soto contrived to get out of the town and to place himself at the head of his men, whom he at length succeeded in marshaling into some sort of array, and a long and bloody battle ensued. In the midst of it the town was set on fire. The roofs being covered with thatch, the flames spread with surprising rapidity, and great quantities of very valuable baggage were consumed. In the end, however, after a combat of nine hours, the Indians were driven away, and the Spaniards were left in possession of the ground, though not, it was said, until after twenty-five hundred of the Indians, and among them Tuscaloosa himself, had been slain.

HORRIBLE CONDITION OF THE ARMY AFTER THE BATTLE.

Although De Soto and his troops had thus really gained the victory, and had driven their foes from the ground, still their own situation after the battle was over was perfectly horrible. The thickets in every direction around them were filled with the bodies of dead Indians, which there were no means of burying. Their own men were worn out by the fight. Many of them were killed, and a very large number that had not been killed had been pierced with arrows and javelins, and were now lying upon the ground in agony, filling the air

with heart-rending cries and earnest entreaties for succor. It was reckoned that there were seventeen hundred spear and arrow wounds to be dressed, and there were scarcely any persons qualified to dress them. The men who remained unhurt could have no rest, but were obliged to engage at once in labors of the most urgent necessity. Some were set to work at building huts with branches of trees, to furnish shelter for the wounded men. Others were employed in cutting up the horses that had been killed, to preserve the flesh for food. Others tore up their shirts to make lint, and others cut open the bodies of the dead Indians to obtain from them such parts as would yield fat for making an ointment, to be employed in dressing the wounds. Horrible as this resource was, no other remained, for all the medical stores, as well as every thing else that was valuable, had been destroyed by the fire.

In a word, there was perhaps never an army which was left after a victory in a more dreadful situation than they.

A week was spent in meeting the immediate and urgent demands arising out of the necessities of the occasion, and when at length some degree of order was restored, and the distress and terror of the scene were somewhat abated, so that the com-

mander could have time to reflect upon the condition in which he was placed, he soon found that the situation and prospects of the expedition were now entirely changed. Not only had his own army become greatly disorganized, but the Indians all over the country, who had been apparently friendly for some time previous, had now, he found, assumed universally an attitude of open war. They were beginning to form grand preparations for a combined attack upon him. He had lost almost all his baggage. The stores of goods which he had brought for trading with the Indians, and nearly all the conveniences and comforts provided for the use of the army, had been destroyed. Many of the soldiers had lost every thing except the clothes which they were wearing when the attack took place. They were also all beginning to feel greatly disheartened and discouraged, and even to form conspiracies for preventing De Soto from proceeding any further. It was folly, under such circumstances, they said, to attempt to go on. The only thing that remained for them to do was to make the best of their way to the shore, and there endeavor to find some means of escaping by sea. This they determined should be done, and they began secretly to concert together measures for carrying their determination into effect.

DE SOTO'S DETERMINATION.

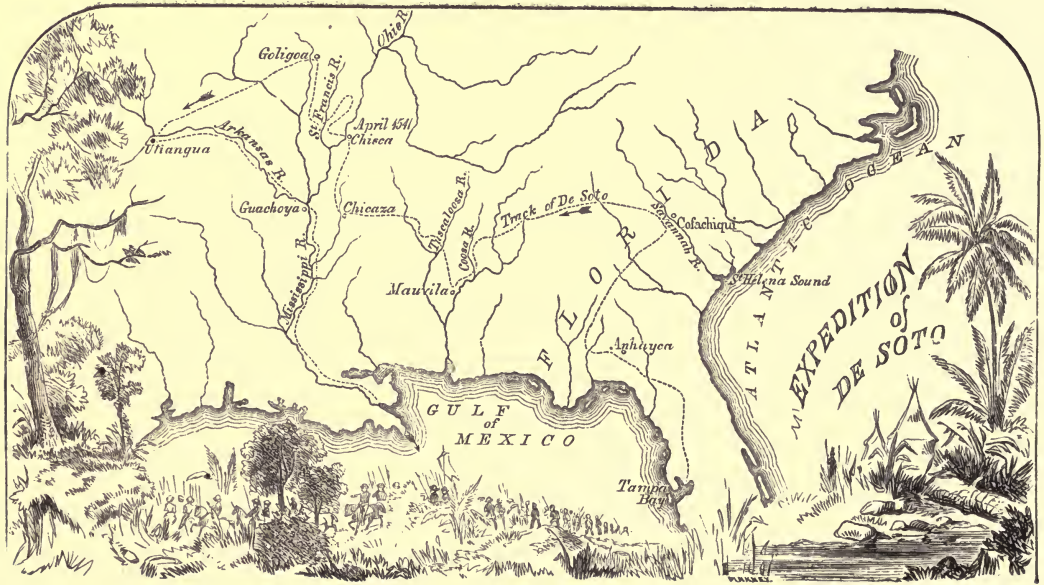
De Soto received some intimations of the existence of this mutinous spirit among his men, and to ascertain whether the report which was brought to him was true, he disguised himself one night and walked through the camp, listening to the conversation which he heard. His suspicions were fully confirmed. He overheard a conversation in the tent of the treasurer and paymaster of the army—an officer of high rank and influence—which convinced him that unless he was prepared to give up the further prosecution of the enterprise, he must lose no time in moving on into the interior, and away from the vicinity of the shore. And inasmuch as, notwithstanding the severe blow that he had received, his own indomitable spirit was not yet broken, he determined to march to the northward without any delay.

THE GREATEST OF THE LOSSES FROM THE FIRE.

It is a very curious circumstance that the Spanish historians who have recorded these events say that the loss which the army felt more seriously than all the rest, in this destruction of their stores and effects at Mauvila, was that of a small supply of wheat flour and of wine, which the priests had brought with them for celebrating the Lord's Sup-

per in the Mass. These precious supplies were packed with the most valuable part of the baggage, and were in the town when the fire broke out, and so were consumed. Great was the distress of the priests—and also of the whole army, if we may believe what the historians say—at this loss, which they considered the most serious of all the terrible results of the calamity. The priests held a solemn consultation to determine whether the use of a bread made of *maize*, for the holy communion, would be allowable in an emergency like this; but after mature deliberation they decided that it would not be. Nor had they any substitute for the wine. All the holy sacerdotal garments, too, in which the priests were accustomed to officiate at the altar, had been consumed.

The consequence was that from this time, on Sundays and on other days, when mass should have been said, the army was assembled as usual, and the service was read, with all the prayers, litanies, chantings, incense burnings, and other ceremonies belonging to it, but with the omission of the part relating to the bread and wine. They called the service thus performed a *dry* mass. For sacerdotal garments the priests made imitations of those that were lost as well as they could, from deer skins which they procured of the Indians.


Ohio R.
Goligoca
St. Francis R.
April 1541
Chiscu
Arkansas R.
Quiangua
Guachoya
Chicaza
Chisca Issa R.
Coosa R.
Track of De Soto
Mississippi R.
Mauvila
Cofachiqui
Savannah R.
St Helena Sound
FLORIDA
ATLANTIC OCEAN
EXPEDITION of DE SOTO
Ashuyen
GULF of MEXICO
Tampa Bay

CHAPTER VIII.

DISCOVERY OF THE MISSISSIPPI RIVER.

DETERMINATION OF DE SOTO TO PROCEED.

It was toward the latter part of November, 1540, that De Soto set out again upon his march, after the battle of Mauvila. He took a northerly direction, with a view of penetrating further into the interior of the country. His hope and expectation were to find some pleasant and fertile region where he could establish a colony, in case he should finally fail of discovering mines of gold and silver, or any native population possessed of cities and towns worth conquering and retaining. His hopes, however, after all, were, it seems, not very sanguine. Indeed, it was rather by the influence of pride, forbidding him to go back, than by that of hope, encouraging him to proceed, that his resolution was sustained. He was very deeply chagrined at the disappointments and mortifications which had befallen him, and he became moody, discontented, and irritable. Still he was determined not to yield.

PASSAGE OF THE TUSCALOOSA RIVER.

The army moved on by slow marches six days. At the end of that time the vanguard approached a village on the bank of a river, where they saw fifteen hundred men drawn up ready to oppose their passage. De Soto sent forward a messenger to propose peace and friendship. The Indians replied that they would make no peace with him on any terms. On the contrary, they desired nothing but a war of fire and blood.

De Soto brought up his troops into battle array and attacked the Indians. After a short resistance they retreated to the bank of the river, and paddled across the stream in canoes which they had previously placed there ready for the purpose. As soon as they had reached the opposite shore they established themselves there at different stations up and down the bank, ready apparently to resist any attempt that the invaders might make to pass over.

De Soto sent a body of men into the woods at some distance from the river, where their operations could not be observed by the Indians on the other side, and set them at work there, making two very large flat-bottomed boats, for the use of the army in crossing the river. It required a fort-

night to finish the boats. When they were completed two great trucks were made on which to draw them to the water, and a road was opened. The boats were hauled to the bank of the stream, on these trucks, in the night. They were very heavy, and a large number of mules and horses were required to draw them, the men, too, pushing behind. Each boat was large enough to carry ten mounted horsemen and forty foot soldiers.

The horsemen went on board the boats mounted, in order that they might be ready to ride on shore and rush forward into battle without an instant's delay, if there should be occasion, and the foot soldiers were all completely armed.

Notwithstanding all their precautions for keeping these operations secret, their movements were observed by the Indians, and when the two boats reached the bank and the troops disembarked, they found a large force ready to receive them. The troops landed amid a shower of arrows, but they advanced boldly and drove the Indians away. The boats immediately returned for more troops. The party that had landed were thus very soon reinforced, so that the Indians retreated, and before nightfall not one was to be seen.

The Spaniards then took the two boats to pieces in order to recover the nails which had been used

in constructing them, and immediately resumed their march.

JOHN ORTIZ AS AN INTERPRETER.

A curious incident occurred not long after this which illustrates the ideas that Ortiz entertained in respect to his duty as an interpreter. The place where it occurred was at a certain Indian village named Chicaza. The army arrived here about the middle of December, and as the season was so far advanced and the weather was very cold, and as the natives, moreover, in that region seemed more than usually friendly, De Soto determined to make that place his winter quarters. Of course, while he remained it was very important to retain, as far as possible, the good-will of the Indians, and he accordingly gave very strict orders to all the troops that no injury should be done to any of the natives of the country under any pretext whatever.

Notwithstanding these orders, four of the soldiers went one day to the lodge of a chief who lived about four miles from the camp, and robbed the family of some furs and mantles. The Indians were greatly enraged at this, and those living near began to remove to a greater distance.

As soon as De Soto learned these facts he

caused the soldiers to be brought before him, and sentenced two of them—the ringleaders in the affair—to be beheaded.

Now, for some reason or other, a strong desire to save the life of one of these men soon manifested itself in the army. The name of this man was Francesco Orsorio. He was, perhaps, a general favorite among his comrades, or possibly there may have been some extenuating circumstances in his case, which they thought palliated his crime. At any rate, a strong sympathy was felt for him, and the priests and the officers of the army went to De Soto and begged him to mitigate the sentence, at least so far as to spare Orsorio's life.

But De Soto was inexorable. The men must die, he said, and he ordered them to be taken out into the open ground before the encampment to be beheaded.

While the preparations for the execution were going on a deputation of Indians arrived from the chief who had been robbed, to make complaint to the commander, and to demand that the men should be punished. Ortiz was called in to interpret what these messengers had to say. As he was going in several officers of rank, who were interested in saving Orsorio's life, intercepted him and directed him what to do. He went in, and

when the Indians made—in their own language, of course—the statement and complaint which had been intrusted to them by the chief, and De Soto turned to Ortiz to ask him to interpret the message, Ortiz replied that the meaning of what the messengers had said was, that the chief did not wish to have the men punished, that they had done no serious injury, and that he should take it as a favor if De Soto would pardon them and set them at liberty.

De Soto hearing this determined to pardon the men, and he sent out orders that the execution should be stayed. At the same time he directed Ortiz to say to the messengers that although he had intended to behead the men, still, since the chief himself interceded for them, he would pardon them.

This message Ortiz falsified, too, as he did the other. He told the messengers that De Soto said that the culprits were already in prison, and that they should be punished in the severest manner for their crime, so as to make an example of them to the whole Spanish army.

DE SOTO UNHORSED IN BATTLE.

Hostilities afterward broke out between the Spaniards and this tribe, and in the course of a

battle which took place De Soto was for a few moments in a situation of the most imminent danger, having been unhorsed in the middle of the fight. He was in the act of raising his lance to strike at an Indian who was to the left of him, and in doing so he brought his weight strongly upon the right stirrup, in order to give greater force to the blow, and in consequence of this the saddle turned—the girth not having been properly secured. De Soto fell to the ground, and if other men, both horsemen and footmen, had not rushed at once to the spot, he would have been instantly killed. The men, however, who came up kept the Indians at bay until the fallen man was raised from the ground, and the saddle replaced and secured. De Soto immediately leaped upon the horse's back and rode on into the fight again.

THE ONLY WOMAN IN THE ARMY.

There was but a single European woman connected with De Soto's expedition. She was the wife of a soldier, and had come out with her husband from Spain. She lost her life about this time, endeavoring to save her pearls. The Indians, though they had very little gold or silver, possessed a considerable number of pearls of greater or less value, such as are produced in the rivers of

that part of the country. The soldier's wife had obtained some of these pearls, and she ran back into a burning house belonging to a village which the Indians had set on fire in the night, in order to save them. She forced her way into the house, but in attempting to come out she was arrested by the smoke and flames, and was afterward found burned to death.

SINGLE COMBAT.

In one of the battles fought by the army in the course of this season an occurrence took place which was more like the deeds of chivalry performed by French and English knights among the castles of Normandy, or between the Christians and the Saracens in the crusades, than like an incident of Indian warfare. The two armies were on opposite sides of a small river, each defying the other, when an Indian, separating himself from his companions, went down to the bank of the river, armed with his bow and arrow, and there, shouting out to the Spaniards on the other side, he contrived, partly by words and partly by signs, to signify that he challenged any one of them to take a bow and arrow too, and come down to the shore and fight him at single combat,—shooting across the stream. One of the soldiers, hearing this, a

man named Juan de Salinas, declared that he would accept the challenge, and he accordingly prepared to leave the thicket, where he had taken refuge with several of his companions, to go down the bank. One of his companions offered to go with him to hold a shield over him while he was shooting. But Salinas said he would take no advantage. He preferred to go alone. So he walked down to the brink of the stream, and took his stand opposite the Indian. He was armed with a cross-bow, a weapon which was much in use in European armies in those days.

Both the Spaniard and the Indian shot at the same moment, and the two arrows passed each other in crossing the stream. The Spaniard's shaft struck the Indian in the breast. The poor man would have fallen had it not been that the other Indians who were standing by ran up at the instant, supported him, and bore him away. The Indian's arrow struck the Spaniard in the neck, and passing through just under the skin, it remained in the wound, crossing the neck. Salinas walked back to his companions in the thicket, bearing the arrow still in his neck, and exhibiting it triumphantly, to show how lightly he had himself been touched, while his antagonist had been mortally wounded.

LANGUAGE OF SIGNS.

The Indians often displayed great ingenuity in conveying their meaning by signs, whether they wished to make offers of peace, or to express hostility and defiance. On one occasion, when they were separated from the Spaniards by a river, but yet were in full view of them, they built a very large fire, and then taking one of their companions they first made motions as if knocking him on the head. He pretended to fall, as if stunned. Four of the others then took him up by his arms and legs, and swung him to and fro, as if they were going to throw him into the fire—the others beckoning to the Spaniards and pointing to the man while they were swinging him, to signify that that was the way they intended to serve the Spaniards themselves whenever they should get them into their power.

ARRIVAL ON THE BANKS OF THE MISSISSIPPI.

It was in the month of April, 1541, that the expedition came in sight of the Mississippi. At the place where they arrived on the bank there was a town called Chisca. At one end of the town was the residence of the chief. It was built upon a high artificial mound, and the only way of access to

it was by a sort of ladder. As soon as the army came in sight of the town, those in the van rushed forward into it in confusion, and began taking possession of every thing they saw. They made prisoners of all the Indians that they could seize, and began pillaging the houses.

The chief who ruled over the tribe was old and infirm, and he was at this time lying ill in his bed. But hearing the uproar in the village, he aroused himself and insisted on going forth to repel the invaders. But the women and the other attendants around him held him back. They told him that the enemy who had come upon them was a body of very large and powerful men, such as had never been seen before, and that it was useless to attempt to drive them back by force. It would be far better, they said, to pretend friendship for them for a little time, until the chief could send around to the neighboring country and obtain help from other tribes.

By this time, too, De Soto had arrived, and had succeeded in restoring some degree of order in the town. Finally a sort of treaty was made by which the chieftain agreed to allow De Soto to remain in his country in peace, in order to rest and refresh his men, on condition that the prisoners and the

pillage which the soldiers had taken should be restored.

The prisoners and the pillage were accordingly surrendered, and De Soto remained at peace in this encampment for six days.

ASPECT OF THE RIVER.

The river, at the point where De Soto first came upon it, was very wide, and the torrent of water which was rushing along in the bed of it was so great and rapid that De Soto was filled with astonishment at the magnificence of the spectacle. The water was extremely turbid, too, and was filled with floating trees and all sorts of rubbish. De Soto named the stream the Great River, or, as expressed in the Spanish language, the Rio Grande. Well might he give it that name, for it was altogether the greatest river that civilized man had at that time ever seen.

The banks were so steep and high that it was almost impossible to descend to the water. De Soto, surrounded by his officers and by the principal persons in the army, stood upon the margin of the bank, and as they looked down upon the boiling and surging torrent that was sweeping so majestically by, they were filled with emotions of wonder and delight.

SEARCH FOR A CROSSING PLACE.

De Soto wished to continue his march, but the work of transporting such an army as his across the river, with all the horses, stores and baggage, was, of course, likely to be an undertaking of great difficulty. After remaining for a week where he was, to rest and refresh his men, he put the expedition in motion again, intending to march along the bank of the river, in an ascending direction, until he should find a place where it would be practicable to cross it.

He went on in this way, following the windings of the river for many days, but finding the bank so steep every where that it would be impossible to get boats down to the water for conveying the army across. At length he came out to an open plain near the river, where there was an excellent place for an encampment, with a forest of good timber near for building boats, and a practicable slope from the bank to the water. Here De Soto halted, and the work of building boats was commenced.

A FLEET OF CANOES.

One day during the time that the Spaniards remained at this encampment waiting for the boats to be built, they saw a fleet of nearly two hundred

canoes coming down the river. The canoes were filled with armed Indians, their skins painted in a frightful fashion, and their heads and various other parts of their bodies adorned with feathers, beads, porcupine quills, and many other barbaric decorations. They carried shields made of buffalo hides, stretched upon frames of suitable size and form. Some of the men in each boat stood ready with these shields to shelter the men who paddled, while others occupied commanding positions in the bow and in the stern of the boat, armed with bows and arrows.

There were some canoes which were conspicuous among the rest on account of their greater size and more fanciful decorations. These larger boats had awnings, also, to shelter the persons occupying them. They were the canoes of the Cazique, as the Spaniards called him, and of his principal officers and attendants.

On hearing of the approach of these canoes De Soto, attended by his principal officers, came down to the shore. The canoes continued to advance until they came near enough to the shore to open a parley. The Cazique, standing up in his canoe, addressed De Soto, saying that he had come to make a treaty of friendship with him, and to offer his assistance in case anything that he could do

would be of service to the strangers. He had heard, he said, that the commander of the expedition was the most powerful prince and warrior in the whole earth, and he came accordingly to express his satisfaction at being visited in his dominions by a personage so renowned.

De Soto suspected that these fine words were only a mask to cover and conceal some treacherous design. He, however, gave the Cazique a polite reply, speaking, of course, as the Cazique had done, through interpreters, and invited him to come on shore that they might converse with each other more conveniently. The Cazique made no direct answer to this proposal, but instead of coming on shore himself he sent forward three of his canoes, with presents, in token of friendship. The presents consisted of fruit and a kind of bread made of the pulp of the persimmon, which is a species of plum.

De Soto again invited the chief to land, but he still kept off from the shore, and De Soto fearing that the force in the canoes might make an attack upon him, ordered his men to be marshaled in order of battle. The Indians seeing this were alarmed, and turning their canoes began to paddle away. The Spaniards sent a shower of arrows from their crossbows after them. Five or six of

the Indians were killed and many more were wounded. The canoes continued their retreat in good order, the men with the shields covering and protecting those who paddled.

The act of firing upon the Indians under these circumstances would seem to be wholly unprovoked and unjustifiable. Probably De Soto was convinced that the intentions of his visitors were really hostile, and that his best policy was to strike terror into them by acting decisively at the outset.

The canoes remained in the neighborhood for some days after this and seemed to be intending to make an attack, but they finally went away and left the Spaniards to go on with their boat building in peace.

CROSSING THE MISSISSIPPI.

In about three weeks the boats were completed. There were four of them. They were built in the most solid and substantial manner, being flat-bottomed in form and of very large size.

The building of the boats was kept secret as much as possible, in order to prevent the Indians from discovering the design of the expedition to cross the river. When the boats were ready they were drawn to the bank of the river and launched,

in the night. The passage of the troops also was to be commenced in the night, so that, if possible, a considerable force might be transported and established on the opposite bank before the Indians could be apprised of their coming, and thus assemble to oppose them.

The boats were manned and the troops embarked on board of them about three hours before day. Four horsemen went in each boat, all mounted, and ready to leap their horses out upon the beach the instant that the boats should touch the ground. The party had, of course, no means of knowing whether they would find an enemy at the landing or not.

The distance was so great across the river—for the stream was there about a mile and a half wide —that even in the day time a man could scarcely be discerned on the opposite bank. In the night the bank itself could not be seen, so that as the boats left the shore and went out over the surface of the water the men could see nothing before them but darkness and gloom, while all around them the water was sweeping wildly by in vast whirlpools and boiling surges, threatening to bear them irresistibly away, with the floating trees and matted masses of drift wood which it had already subjected to its will.

It seems that the water shoaled very gradually on the further shore, so that the boats grounded when they were still a hundred and fifty feet from the dry land. The horsemen immediately leaped their horses over the bows and then advanced rapidly up through the shoal water to the bank. They found no one there to oppose them. The foot soldiers were immediately landed, and the boats returned for a new load.

The process of transporting the troops and the baggage occupied nearly the whole day, but about two hours before the sun went down all were safely over.

The men took the boats to pieces to recover the nails, as they had done before, and then the expedition resumed its march. The direction which it followed was toward the northward, ascending the river, though moving at some distance from the banks, in order to avoid the low lands and the windings of the stream.

GRAND RELIGIOUS CEREMONY

A singular incident occurred at a distance of some days' journey from this place. The chief of a certain tribe came to De Soto with a request that he and his men would pray to their God for rain, for the country was parched with drought,

and they had exhausted all their prayers and incantations without any effect.

De Soto determined to accede to this request. He caused the largest tree that could be found in the forest to be felled, and from it the carpenter made a cross of immense size. The Spaniards set up this cross upon an elevation on the bank of a small river, and performed a solemn mass around it in the presence of a concourse, it was said, of fifteen or twenty thousand savages, who assembled on the opposite side of the river to watch the proceedings. A grand procession was formed, consisting of the whole army, except a small guard left to protect the camp. This procession, headed by the priests, moved round the mound on which the cross was erected in a slow and solemn step, chanting the litany as they marched, and singing hymns. When the ring was formed the whole procession fell upon their knees, and prayers were offered by the priests for rain. The service was connected with various other imposing ceremonies, such as are prescribed by the Catholic ritual.

The Indians, it is said, were greatly impressed by the solemnity of this spectacle, and the narrator of these occurrences adds that on the same night the whole country was refreshed with a copious shower.

INCIDENTS OF THE MARCH.

The expedition continued after this to ascend the river for some time, and met with a great variety of incidents and adventures, which cannot here be particularly described. They found the land extremely fertile and the scenery charming. The country was, moreover, quite populous, being occupied by many different tribes, some of which possessed towns of considerable size and many fields of maize. With some of these tribes De Soto made treaties of peace and friendship. Against others he made war. Sometimes he would form a league with one chieftain to fight with him against some other one, his rival and enemy. He very often received urgent requests to form alliances of this kind.

In one case of this kind two young and beautiful wives of a certain chieftain had been taken captive, and they remained for some time in the hands of the enemy. Afterward, through De Soto's influence, they were restored. But the chief, their husband, when they were brought back, offered them as a present to De Soto. De Soto declined to receive them. Then the chief asked him to give them to some of his officers or soldiers, for, according to the customs of the Indians, he could not re-

ceive into his household again wives who had once been held as captives by his enemy.

Accordingly De Soto, knowing, as it was said, how cruelly women were sometimes treated in cases like this, by their former friends, received the two discarded wives, and allowed them to go on with the expedition, among the other followers of the camp. Their names were Macanoche and Mokifa.

DE SOTO BEGINS TO BE DISCOURAGED.

Notwithstanding the general fertility and beauty of the country, De Soto was more and more dissatisfied the further he proceeded, both with the results which he had thus far attained and with his prospects for the future. Beauty and fertility were not what he was seeking. His object was gold, and there was no gold to be found. He went on toward the northward as far as to a certain town named Coligoa, and there, thinking it useless to proceed any further in that direction, he concluded to turn his course, and to journey for a while toward the south and west. He went on in this way, meeting with a great variety of adventures, which cannot be here described, until at last he reached a place called Utianqua, on the Arkansas river. The Indians had informed him that there

was a great lake at this place, which he hoped would prove an arm of the sea; for he was now fast coming to the conclusion that the time was drawing near, if it had not already arrived, when he must begin to think of the means of withdrawing from the country.

He found no arm of the sea at Utianqua, and not even the promised lake. But the summer and autumn were now well nigh gone, and so he made a friendly arrangement with the tribe that occupied the country in that region, and concluded to spend the winter there. He set his men at work, with the help of their Indian slaves, to build a fort and village of huts, and there the army remained until spring.

During the winter De Soto had full time to reflect upon his position. His hopes of finding a country rich either in gold and silver, or in other wealth, which he could conquer and possess, had well nigh faded away. He had lost nearly half his troops, so great had been the hardships and sufferings of various kinds to which they had been exposed. His horses had nearly all perished from fatigue, or been killed and eaten for food. His interpreter, Ortiz, was dead, and he found infinite difficulty in communicating with the new tribes of Indians that he now met with on his way. He had

brought on with him, it is true, persons to serve as interpreters from all the different provinces through which he had passed, but the only way of understanding the natives of the country where he was then sojourning was by having what they said translated in succession from one of these interpreters to another, back through all the dialects intervening between the Arkansas river and Tampa bay. The questions asked and the answers returned had sometimes to pass in this manner through eight or ten different languages or dialects before De Soto could obtain the information that he desired, and then the purport of what was said was often so changed and perverted by mistakes and mistranslations that it was almost impossible to procure any intelligence on which he could rely.

DETERMINATION TO TURN TOWARD THE SEA.

Accordingly, when the spring opened, he determined to make the best of his way toward the sea. This was in the spring of 1542. He broke up his camp and set out upon his march, intending to go down the Arkansas river to the Mississippi, and then to follow that river to the Gulf of Mexico, into which he supposed it must empty. What the distance was he had no idea, but he knew well that by going down the river he must sooner or later

come to the mouth of it on the shore of the sea, and there, if he could not build vessels sufficient for the conveyance of the whole expedition, he could at least build one, and by this means communicate with Cuba, and thus obtain any assistance that he might desire.

The army moved slowly on, but the difficulties and hardships which they encountered seemed now to increase at every step. They set out too early in the spring, and their march was impeded by snow storms and cold rains, which made every thing wet and cheerless, and greatly increased the fatigue and suffering of the men. The Indians, too, became more and more hostile, and they harassed the army exceedingly on their march. There was no alternative, however, but to press on. The army, therefore, continued to advance, but the strength and spirits of the commander were failing sensibly every day.

SICKNESS AND DEATH OF DE SOTO.

At length the expedition reached the Mississippi, at an Indian town named Guachoya, but here new difficulties and embarrassments awaited them. The Indians were extremely hostile. There was great difficulty in crossing the river. De Soto himself, too, was now seriously ill. He was convinced that

he could proceed no further. He ordered his men to encamp and to fortify their position, for they were surrounded by hordes of hostile Indians that were thirsting for their blood. Double guards were set. The horses were kept caparisoned, and the soldiers slept upon their arms. The anxiety necessarily attendant on this state of things increased De Soto's malady. He fell into a burning fever, and was soon fully convinced that his end was drawing near.

He accordingly called the officers of the army to his couch and formally appointed one of his generals, named Luis de Moscoso de Alvarado, as his successor in the command of the army, and he charged all the others to submit to his authority, and to sustain him in the exercise of it by every means in their power. He also caused the soldiers to be called in around him, in companies of twenty and thirty at a time, and in this manner gave them his dying injunctions and bade them farewell.

Having thus done all in his power to secure the safety and welfare of the army after his death, De Soto made his will. So exhausted were the stores of the army at this time that only a very small piece of paper could be found for the purpose, and the will was written in very few words, and with

many omissions and abridgements. When the will was completed the priests came in, and the dying man confessed his sins and received absolution.

From this time his vital powers began to ebb away very rapidly, and after some days of continued fever and delirium he died.

THE BURIAL OF THE BODY.

Moscoso and the other officers were at first somewhat perplexed to know what to do in respect to the disposal to be made of the body. They feared that wherever they might bury it the Indians would disinter it, in order to insult and triumph over the remains. They accordingly made arrangements for a very secret burial in a place on the plain near the camp, setting a guard to prevent any Indians having access to the place while they were digging the grave and interring the body. In order the better to deceive the Indians, they pretended that the governor, as they called him, was better, and was likely to recover; and they made a display of public rejoicings in the camp to celebrate his convalescence. They also resorted to every possible means for obliterating all marks upon the surface of the ground where the grave had been made.

They soon found, however, that the Indians had

BURIAL OF DE SOTO.

not been deceived. It was ascertained that they knew that the governor was dead, and it was suspected that in some way or other they had discovered the place where he had been buried. The Spaniards determined, therefore, to adopt another plan for disposing of the body, by means of which they hoped to make it sure that it could never be disturbed. This was to sink it in the middle of the river.

So they felled a tree in the forest—a species of oak, the wood of which is so heavy that it will sink, and made a massive coffin of it, by cutting off a portion of the trunk of suitable length, and hollowing out a cavity in it large enough to contain the body. They were obliged to resort to some such method as this for sinking the body, for the soil was entirely alluvial there, and no stones were to be found. When their rude sarcophagus was finished they disinterred the body, and after placing it in the log they covered it by planks of the same material, nailed firmly on. They then bore the body thus inclosed down to the bank of the river by night, and there, with appropriate ceremonies, they put it on board a boat, rowed out into the middle of the stream, and launched it into the water among the turbid whirlpools that were surging by.

The river at the place where the coffin sank was reported to be more than a hundred feet deep. Two officers had gone out the day before, under pretense of fishing, to sound the depth of the water in different places, in order that the body might be sunk in the very center of the channel.

CONDITION OF THE ARMY AFTER THE DEATH OF DE SOTO.

The officers and soldiers of the army were, after all, not really much grieved at the death of their commander. They were heartily tired of the country and wished to escape from it. And yet some of the officers were unwilling to give up the enterprise, without making some further efforts to carry out De Soto's plans. This difference of opinion led to discussions and debates, and in some cases to insubordination. One conspicuous case of desertion occurred, though it might have been supposed that desertion, especially on the part of the officers, would not be one of the dangers to which an army, under such circumstances as these, would be exposed.

CASE OF A DESERTER.

The desertion occurred soon after the army resumed its march, subsequent to the death of De Soto, and the case illustrates curiously enough the

relations which sometimes subsisted between the Spaniards and the Indian chieftains. The name of the officer was Diego de Guzman. He was a dissipated man, it seems, and a great gambler. He had also in his keeping a beautiful Indian girl, the daughter of a chieftain who lived at some distance from the place where the army was now encamped.

One day this man was missed from the camp, and on making inquiry for him it was ascertained that he had been gambling some days before and had lost everything he possessed. He first played away his money, then his arms, then a fine black horse which he rode, and, last of all, he staked the Indian girl. He lost her too.

He surrendered everything at once to the winner except the girl; but as for her he asked the winner to allow him to retain her in his own hands for a few days, at the expiration of which time he promised to deliver her. To this the winner consented, and since that time Guzman had not been seen or heard of.

It was generally supposed that he had abandoned the expedition, being ashamed of his gambling, and vexed with the losses which he had sustained; and being, moreover, very probably deeply in love with his Indian girl. This supposition was found,

after due inquiry, to be correct. It was reported from good authority that he had gone with the girl to her father's village, and that he was living with her there. But in order to ascertain positively that he had really gone there of his own accord, and was not in any way under restraint in remaining, it was determined to send him a letter.

Accordingly, the commander of the expedition requested another officer, the one who had been Guzman's most particular friend, to write to him, inquiring how it was with him, and inviting him earnestly to return to the camp, promising him at the same time that if he would do so his horse and his arms should be returned to him. This letter was sent by an Indian. The messenger was gone three days. He brought back only a verbal answer, for Guzman, in his new home, had no convenient means of writing. In order, however, to authenticate his answer and to prove to his friend that the letter had really been delivered to him, he wrote his name upon a blank space at the foot of it with a piece of charcoal, and sent it back.

The Indian on his return brought the letter thus marked, and with it a message from Guzman, to the effect that he was entirely at liberty, but that he was contented and happy where he was, and did not intend to return.

One more effort was subsequently made to induce Guzman to return to the camp, but he refused to do so. He was then abandoned to his fate, and was never heard of more.

END OF THE EXPEDITION.

After meeting with various incidents and adventures, which cannot here be related, the expedition at length came unanimously to the conclusion that it was best to retire from the country. They journeyed on until they came to a favorable place upon the Mississippi, where they built vessels, and embarking on board of them, followed the river down to its mouth, and then undertook to coast along the shore of the sea, in the direction which they supposed led to the nearest Spanish settlements. They met with a great number and variety of disasters, as might have been expected, in this desperate navigation. They were wrecked upon reefs, they were attacked by the natives, they were dispersed and driven to sea by gales of wind. At last, however, some remnants of the expedition succeeded in making good their escape, and after various wanderings, found their way home to Spain.

CHAPTER IX.

THE RIVER ST. LAWRENCE.

THE THREE CHIEF RIVERS OF NORTH AMERICA.

Next to the Mississippi—including under that designation the whole fluvial system of which the Mississippi proper is the central and connecting trunk—the two most important rivers of the North American continent, considered both in respect to their present commercial importance and to the influence which they have exerted upon the history of the country, by the facilities afforded by them, at a very early period, for penetrating into the interior of the continent, are the St. Lawrence and the Hudson. The circumstances under which these rivers were first discovered and explored are very curious and interesting. The St. Lawrence was first entered by a French navigator—the Hudson by an English one.

JAMES CARTIER.

The name of the navigator who discovered and

first ascended the St. Lawrence was James Cartier.* He made several voyages in the course of his life to the coasts of Newfoundland and into the neighboring seas. The one from which the most important results were obtained took place in the year 1535—more than thirty years after Cabot's general exploration of the coast.

SAILING OF THE EXPEDITION.

The expedition was fitted out from the port of St. Malo, in France. As was usual in the case of such maritime enterprises in those times, a grand religious ceremony was observed a few days before the time of sailing. This service was held in the cathedral of St. Malo. In obedience to the orders of the commander the whole company assembled in the choir of the cathedral, where all, after confessing their sins and receiving absolution, were blessed by the bishop, who stood before the altar dressed in his pontifical robes, and surrounded by other priests who were present to assist in the services. A large concourse of spectators, assembled in the nave and aisles and ambulatory of the cathedral, witnessed the ceremony.

This ceremony took place on Sunday. On the

* Pronounced Car-ti-a.

Wednesday following, the expedition sailed. It consisted of three ships, which were named respectively the Great Hermina, the Little Hermina, and the Hermerillon. These vessels were called ships, but the largest was only of one hundred and twenty tons burden, while the smallest was only a boat of forty tons. It is astonishing that men could be found willing to trust themselves in embarkations of this kind on voyages so distant, and leading into such stormy and icy seas.

THE VOYAGE.

The voyage was an extremely tempestuous one. The ships experienced a favorable wind for one day after leaving the port, and then a succession of gales and storms set in, which continued for more than a month, during which time they were so tossed about, and were buffeted by the winds and waves so severely, that they all narrowly escaped destruction. As they approached the American coast, too, the sea, as is usual in those latitudes, was covered with fogs and scudding mists, which made it impossible to see the way. In such a state of weather it is dangerous for vessels to attempt to keep near each other, for fear of collision; and if they separate at all they soon lose sight of each other in the fog, and then the chance

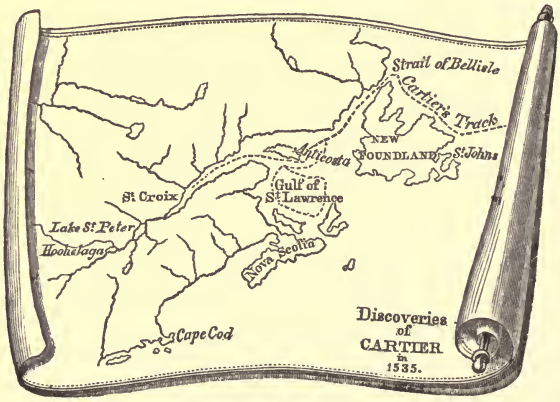
is very small of their coming together again. The vessels of Cartier's squadron were dispersed in this manner before they reached the American shores, but such an accident had been anticipated, and a place of rendezvous had been appointed, where they all safely met at the end of the voyage. This place of rendezvous was a small bay called the Bay of Castles, at the entrance of the strait of Bellisle. The flag-ship of the squadron, the Great Hermina, reached the place of rendezvous on the fifteenth of July. Cartier, who, of course, sailed in this ship, waited there till the twenty-sixth, when he had the satisfaction of seeing both the other vessels come safely in on the same day.

SEARCH FOR A PASSAGE THROUGH THE LAND.

After remaining a short time in port, to supply the ships with water and to rest and recruit the men, the squadron sailed again, and now commenced the search for a passage through the land that might lead to India. Cartier had two Indian interpreters on board, and he relied on these to enable him to open communication with the natives. These interpreters were the sons of an Indian chief. He had taken them from their native land on a previous voyage which he had made to these shores, with the consent, he says, of

their father, on condition that he should bring them back the following year. These men bore the euphonous names of Taignoagny and Domagaia.

The Bay of Castles, which was the place of rendezvous for the squadron, is situated, as has already been said, at the entrance of the Strait of Bellisle. The squadron passed down through this



DISCOVERIES OF CARTIER.

strait into the Gulf of St. Lawrence, and after exploring the shores of the gulf for some time they came at length to the mouth of the St. Lawrence River.

The mouth of the St. Lawrence, at its entrance

into the bay, is very wide. It forms, in fact, quite an arm of the sea, and Cartier hoped that it might lead to the long sought for passage to India. The body of water he found was ninety miles wide, and on sounding it in the center of the channel it proved to be more than two hundred fathoms deep; and as the water was salt, he thought it might be really a strait leading between two islands to an open sea beyond.

But the two Indians whom Cartier had with him on board his ships assured him that this was not so. They said that the channel of water before them was really "the beginning of a great river—that the further it went the narrower it came—that after a certain distance it became fresh water, and that this fresh water went so far upward that they had never heard of any man who had gone to the head of it, and that in the upper portion of it there was no passage but with boats." This was discouraging, and Cartier concluded to turn his course in another direction and postpone making an attempt to verify the statement of the Indians in respect to this opening till he had examined other portions of the gulf.

INTERCOURSE WITH THE NATIVES.

He accordingly continued his course along the

coasts of the gulf of St. Lawrence, looking everywhere for a passage opening toward the west, but not finding any. He found many fertile tracts of country, some of which produced noble forests, and were inhabited by powerful tribes of Indians. These Indians often came out to the ships in their canoes, and they were always in such cases very kindly received. They were somewhat cautious, usually, at first, but on being accosted by the interpreters, and being assured by them that the strangers would do them no harm, they were soon persuaded to come on board. They often, moreover, received parties from the ships in their villages on shore, and opened quite a traffic with them, giving them furs, muskmelons, corn, and other productions of the country, in exchange for beads, needles, and toys of various kinds.

THE EXPEDITION ASCENDS THE RIVER.

At length, about the middle of September, Cartier returned to the mouth of the St. Lawrence and began to ascend the river, advancing very cautiously, and examining the shores with great interest as he proceeded. He found the country beautifully wooded. The forests were filled with trees of every variety of foliage, and wild flowers grew in great profusion along the margin of the

water. There were many Indian villages, too, scattered along the banks of the river, each standing in the midst of extensive fields of maize and of gardens, in which pumpkins, beans, and other plants, cultivated by the natives, were growing. The scene, as it presented itself to the view of Cartier's company, gazing upon it from the decks of the ships, as the little squadron slowly advanced on its way, following the windings of the stream, was invested with an indescribable charm. The magnificence and richness of the scenery were greatly heightened, too, by the glowing autumnal tints which were spread over the forests, fields and gardens, at this season of the year.

The party made acquaintance with many of the Indian inhabitants as they ascended the river. The natives were always at first much alarmed, but when they saw the two interpreters, and were accosted by them in their own tongue, and assured that the strangers would not harm them, their fears were allayed, and they came off in great numbers in canoes from the shore. They were ready to sell every thing they possessed for the beads and trinkets which Cartier and his men had ready to offer them, and after making these trades they always went away greatly delighted with their purchases.

DONNACONA.

After three days' sail up the river, the expedition came to the dominions of a chief named Donnacona, whose country was called Canada. Donnacona came down the river from the village where he usually resided, with twelve canoes filled with his men, and the most friendly relations were soon established between the two parties. When the fleet of boats arrived near the ships, Donnacona's canoe came forward in advance of the rest, and the chieftain, standing up in it, made a long speech in a very loud and declamatory style, and with much extravagant gesticulation. Of course, Cartier, who stood upon the deck of his ship, listening very respectfully, could not understand a word of what was said, but his interpreters informed him afterward that it was a speech of friendliness and welcome, and Cartier received it accordingly. He invited Donnacona on board his ship, and there hospitably entertained him, and made him presents of hatchets and knives and other such articles, the receiving of which filled him with astonishment and delight.

After this Cartier went on board the chieftain's boat, to return the visit. He took with him some bread, which, as it was made of wheaten flour,

was entirely new to the natives, and also some wine. With these he treated Donnacona and his personal attendants in the canoe. They were exceedingly pleased with these refreshments. In a word relations were at once established between the Europeans and the Indians of the most friendly character imaginable.

After this the canoes returned up the river to Donnacona's village—the vessels following. Cartier remained at this village for some days, engaged in the most friendly intercourse with the natives all the time, and meeting with a variety of amusing incidents and adventures, which cannot, however, here be detailed. He gave the name of St. Croix to this place.

ACCOUNTS OF HOCHELAGA.

While Cartier was at this village he heard that at a distance of some days' sail further up the river there was a very large and prosperous Indian settlement called Hochelaga, and he received such glowing accounts of the wealth and populousness of this place that he determined to proceed to it. He proposed that Donnacona should go with him. But Donnacona, though at first he seemed to acquiesce in this plan, yet very soon, when he found that Cartier was in earnest in his intentions, set

his face strongly against it. It was supposed that it was a sort of jealousy of the chief of Hochelaga which prompted him to do this, and a desire to monopolize for himself the advantages of the trade which was going on so prosperously at that time between his people and the Europeans.

He endeavored at first to dissuade Cartier from going on, urging various considerations such as he imagined might influence his mind. When he found that his arguments were unavailing he said plainly that Cartier *must* not go. He would not allow it.

Cartier replied coolly that he certainly should go, whether Donnacona allowed it or not.

Donnacona, after considering the subject a little longer, adopted another plan. He came out in his canoe to Cartier's ship, bringing with him a number of attendants, and also three children, a girl and two boys. He brought these children on board the vessel, and there, with great ceremony, he drew a circle upon the deck, and brought Cartier and the children, together with himself, within it. His men stood outside looking on. Donnacona then formally offered the girl to Cartier as a present. She was about twelve or thirteen years of age. He next offered the two boys in the same manner. His men then, standing outside the

circle, immediately shouted out three times with a sort of shriek or yell, terrible to hear. Cartier asked his interpreters what all that meant. They said it was in token of friendship, and the children were presents made by the chieftain to Cartier. They were near relatives of his. The girl was his niece, and one of the boys was his brother.

Cartier then desired the interpreter to express his thanks to Donnacona for his presents, and he was told in reply that they were given to him to induce him to abandon his design of going up the river any further.

Cartier replied that if this were the case Donnacona might take his presents back, for he had been ordered by the king of France, his master, to go as far into the country as he could, and that he should most assuredly proceed.

ATTEMPT TO FRIGHTEN CARTIER BY AN APPARITION.

Donnacona tried one more plan to deter Cartier from going up the river, and that was an attempt to frighten him from it by an apparition of devils. The manner in which the affair was managed was this:

One day, when the two interpreters were on the shore, with some of the other natives, in a wood, there suddenly appeared to Cartier and his men,

on board the vessels, a boat coming out from behind a point of land with three men in it, dressed to represent the Indians' idea of devils. Their faces were blacked, and they were clothed in dog-skins, black and white. They wore horns upon their heads more than three feet long. On the whole, they presented a most hideous aspect. They stood up in the canoe as it passed by the ships, making frantic gesticulations and uttering strange outcries. One of them seemed to be making an oration, talking loud and earnestly, but he did not look toward the ships, nor appear to take any notice of them.

Donnacona, who seems to have been at the time on board Cartier's ship, immediately set off with a number of his men in one or more canoes to pursue the devils. They soon overtook them. The devils immediately fell prostrate in the bottom of their boat, as if dead. Donnacona and his men took them to the shore and conveyed them into the wood, where they were out of sight from the ships, but noises could still be heard in that direction, and very soon there came among them a sound like that of some one in a state of great excitement, making a long speech in loud and very earnest tones, like the screaming of a maniac.

This continued for half an hour. At length

the sound ceased, and very soon afterward Taignoagny and Domagaia were seen coming out of the wood and hurrying down toward the shore, holding their hands clasped toward heaven, and crying out in a state of great excitement, "Jesu Maria! Jesu Maria!" and uttering other similar exclamations.

Cartier called to them and asked what was the matter. For a time they could not give any intelligible answer, but after being repeatedly questioned they said that those three black men had been sent by the god Cudruaigny to warn all concerned that no one must go up the river, for there was so much ice and snow in the region of Hochelaga, that whoever went there would be destroyed.

To this Cartier replied by directing the interpreters to tell the black messengers that their god Cudruaigny was a noddie, and that he did not care anything for him.

"They will see," said he, "that we have a lord and master, Jesus, who will defend us from all cold, if we will put our trust in him."

The interpreters asked Cartier if he had seen Jesus himself. He replied that he had not, but that the priests had seen him, and that he had promised them fair weather for the expedition in ascending the river.

CONTINUED ASCENT OF THE RIVER.

The difficulties were at last all surmounted, and the expedition organized for going up the river was ready. It had been planned to leave the two largest vessels where they were, and only take the smallest one, which they called a pinnace, or, as as they spelled it in those days, a pinasse, and two boats, for the party that was to ascend. It was on the tenth of September that this party set out from St. Croix. They advanced slowly and cautiously, examining everything that they saw by the way with great interest and curiosity. The country was beautiful. Indian villages, surrounded with fields of maize, were scattered along the banks of the river, the intervals between these being filled with splendid forests, in which the voyagers recognized great numbers of oaks, elms, cedars, firs, willows, and ash trees, with great quantities of grape-vines, which were now in full bearing, so that, as the historian of the expedition said in narrating these events, "if any of our fellows went on shore they came home laden with them." They saw, likewise, many cranes, swans, geese, ducks, pheasants, partridges, thrushes, blackbirds, redbreasts, nightingales, sparrows, and a variety of other birds.

The Indians that dwelt along the banks of the river often came out in boats to visit the strangers and to traffic with them. The chiefs brought presents, and among other things they offered Cartier several children. Some of these children he accepted and others he declined.

In fact, the most friendly relations existed between the exploring party and the natives throughout the whole voyage. Whenever the strangers landed the Indians came down to meet them without manifesting the least fear, and Cartier seems to have trusted in an equally implicit manner to them. At one time, when he wished to go on shore at a place where the water shoaled so gradually that his boat could not approach very near, an Indian came out wading to the boat, and Cartier, without any hesitation, mounted upon his back, and was thus carried to the land.

LAKE ST. PETER.

After going on in this manner for many days the expedition arrived at a place where the river expands into a lake fifteen or twenty miles wide. They gave to this sheet of water the name of Lake St. Peter. They explored the shores of this lake in every part, and found some difficulty in ascertaining where the main stream entered it at the

upper end, inasmuch as they found the mouths of several considerable rivers along the borders of it. And when at length they discovered the true place of egress they found the stream so much smaller than it was below, and the navigation, moreover, so much obstructed by rapids, that they concluded not to take the pinnace any further, but to leave her in the lake, and go on up the river with the boats alone.

So the commander caused the boats to be made ready, and loaded them to the water's edge with provisions and other things necessary for the voyage. Of course, a considerable portion of the party were to be left in the pinnace, as only a limited number could be taken in the boats. Several gentlemen, who were attached to the expedition, wished to go on, among whom are mentioned "Claudius of Ponte Briand, cup-bearer of the Lorde Dolphin of France, Charles of Pometaye," and others. With these there were twenty-eight seamen, fourteen for each boat. This number implies that the boats must have been of very considerable size.

The result of the inquiries made by Cartier of the Indians, in respect to the distance from the lake to Hochelaga, led him to judge that it was about one hundred and fifty miles.

APPROACH TO HOCHELAGA.

The boats advanced so slowly in ascending the river that the news of their coming, and of the harmless character of the party, and also of the many curious and wonderful things which they were in the habit of giving and selling to the Indians, preceded them, so that at last, when they began to draw near to the town, being, however, yet at a distance of four or five miles from it, they saw an immense concourse of Indians coming down along the bank of the river to meet and receive them. There were about a thousand persons in this throng—men, women and children. They all came together to the bank of the river, as near as they could get to the boats, and began to toss over presents of bread made of maize, and fishes, and other such things, as tokens of welcome.

Cartier ordered the boats to be turned toward the shore, and he himself and a large portion of his company landed among the natives. They seemed greatly overjoyed at this, and surrounded the strangers with exclamations and gestures indicating the greatest delight. Then they formed lines, the women on one side and the men on the other, and danced and sang for some time. Cartier, in return for this cordial reception, made

presents to some of the principal personages among them, and he made the children both boys and girls, stand in a row, and then passing along the line he distributed a quantity of tin beads and other such trifles among them, which seemed to gratify them exceedingly.

THE BANKS OF THE ST LAWRENCE.

When at length Cartier and his company thought it was time for him to return to the boats the

women came and stood in the way and took hold of them playfully, and for a time would not let them go. And when, at last, they obtained their release and returned on board the Indians did not go away, but remained opposite the boats on the land; and when the darkness came on they built great bonfires along the shore and continued their rejoicings around them late into the night.

VISIT TO THE TOWN.

Very early the next morning Cartier and a select portion of his party, leaving the rest to guard the boats, landed and set off to view the town. After going on for three or four miles they met a deputation of the principal inhabitants, that had been sent to receive them. They found the country in the environs of the town occupied with fields of maize which, with the groves of trees around them, presented a charming picture to the eye. On entering the village they were much struck with the size of the houses and the artificial and skillful manner in which they were constructed. They were built of poles and covered with bark, probably birch bark, but they were very large, each one being intended to accommodate many families. They were generally more than a hundred feet long, and thirty or forty wide.

There was one fire-place in the centre of each, with subdivisions of the dwelling all around the sides for the accommodation of the different families.

The town was strongly fortified, too, with a triple wall made of logs of wood, placed in such a manner as to furnish a rampart above, on which the warriors could stand to defend the place in case of an attack, and a great quantity of stones were collected on this rampart as ammunition. The stones were intended to be hurled down upon the enemy below.

There was a very high hill near the town, which Cartier named "Mont Roial," which name remains, under the form of Montreal, to this day.

FIRST OBSERVATION OF TOBACCO.

While they were at this place the party witnessed, for the first time, the Indian practice of smoking tobacco. They described it in the following language:

There groweth also a certaine kind of herbe, whereof in sommer they make great prouision for all the yeere, making great account of it, and onely men use of it, and firſt they cause it to be dried in the sunne, then weare it about their neckes, wrapped in a little beaſt's skinne made like a little bagge, with a hollow piece of ſtone or

wood like a pipe; then when they please they make pouder of it, and then put it in one of the ends of the said cornet or pipe, and laying a cole of fire upon it, at the other end sucke so long that they fill their bodies full of smoke till that it commeth out of their mouth and nostrils, even as out of the fonnel of a chimney. They say that this doth keep them warm and in health; they never go without some of it about them. We ourselves haue tryed the same smoke, and hauing put it in our mouthes it seemed almoſt as hot as pepper.

RETURN OF THE EXPEDITION DOWN THE RIVER.

The expedition remained several days at this place, and met with a variety of amusing adventures in their intercourse with the natives. At length the party re-embarked on board their boats and returned down the river to Lake St. Peter, where they had left the pinnace. They there returned on board the pinnace, and then continued on their way, meeting with no accident until they reached the river St. Croix, where the two vessels had been left.

It was so late in the season, however, when they arrived here that ice began to form in the river, and Cartier made arrangements for remaining where he was until the spring. Accordingly he put the ships into winter quarters, built a fort on the land, and made all snug for winter.

THE PESTILENCE.

Things went on very well until the middle of December, when Cartier began to hear rumors of a pestilence prevailing among the Indians on the land. It was said that great numbers had died, and that the disease was spreading. Cartier immediately made arrangements to prevent all communication between his men and the natives, but notwithstanding his utmost efforts the disease soon appeared within the fort, and there it spread so rapidly and was so terrible in its ravages, that before long the company was reduced to a condition of extreme distress.

The disease, as the narrator of the history of this voyage described it, appears to have been what is called the sea-scurvy—a dreadful pestilence which in those days often infected ships' crews on long voyages. It was caused generally by the subjects of it having been confined for a long time to a diet consisting of salted provisions, and also to their being reduced in strength by hardships, fatigue, and exposure. The disease, when it once gets a footing in a ship's company, becomes a pestilence of the most dreadful character imaginable. The effects of it are too shocking and horrible to be described—the body becoming under it some-

times a mass of living putrefaction. The disease is now no longer feared, for remedies have been discovered so efficacious that it is perfectly easy at the present day to keep it under complete control, but in the times of which we are writing it was a terrible pest. Whole crews were affected by it. Commodore Anson on one of his voyages lost four-fifths of his men; and on one occasion a Spanish ship, called the Oriflamme, was found drifting at sea, at the mercy of the winds and waves, and those who discovered her, on going on board, found dead bodies lying about upon the decks and in the cabins, but not a single man alive. The whole crew, to the very last man, had been swept away by this terrible disease.

EXTREME DISTRESS AND SUFFERING.

Cartier's company suffered dreadfully under the visitation of the malady. Out of his whole company of more than a hundred, not ten remained well. Great numbers died. Those that were well were not able to take proper care of the sick, and still less had they strength to bury the bodies of the sufferers when they were dead. So they conveyed the bodies away to some distance from the fort and covered them up in the snow. It was all that they could do.

The winter, too, was extremely cold, and this greatly increased the sufferings of the men. The ships were frozen into the ice in the middle of November, and they continued thus imprisoned until the middle of March. The ice, they said, was six feet thick. This, if their estimate was not exaggerated, proves that the winter must have been exceedingly severe.

STRATAGEMS AGAINST THE INDIANS.

Indeed, so extreme was the distress of the company, and so desperate was the condition to which they were reduced, that at one time Cartier gave up all expectation of ever seeing France again. His anxiety was greatly increased, too, by fears that the Indians might turn against him. Certain indications that he observed appeared to denote this. He resorted to a great many artful contrivances to deceive the Indians in respect to the condition of the company while the pestilence was at its height. One of these was a curious ruse that he adopted to prevent them from inferring that a great many of his men were disabled by sickness, from the fact that they saw so few of them, from day to day, outside the fort. He would send out a few well men from the fort into the neighborhood of the Indians, and then he would go after

them and drive them back with sticks and stones and loud scolding, in order to give the Indians to understand that he had work for them to do within, and that they were playing truant. He made signs to the Indians to this effect—denoting that the men ought to be at work with the rest, in repairing and caulking the vessels. In order the better to carry out this idea he required all the men on board the vessels, and also those in the fort who were not so sick as to be utterly helpless, to keep up a great knocking and pounding with sticks and stones, whenever there were any Indians near enough to hear.

RETURN OF THE EXPEDITION

At length, however, the spring came on, and in the mean time a plant had been brought in by the Indians which produced an almost magic effect in staying the ravages of the pestilence. The men who remained alive gradually recovered, and at length, after encountering a great variety of difficulties, and meeting with many strange and curious adventures, the remnant of the expedition was released from its confinement, and set sail for France, though, on account of the diminution of their numbers, they were obliged to leave one of their ships behind them.

THE KIDNAPPING OF DONNACONA.

When the time arrived for the expedition to set sail, Cartier was guilty of an act of treachery against Donnacona of the most inexcusable character. He kidnapped him and carried him with him to France.

This deed was the more censurable from the fact that Donnacona had always acted in a friendly manner toward the expedition, and had in many ways rendered most important services to the whole party. It is true that, toward the end of the winter, Cartier thought he observed certain suspicious appearances which led him to imagine that his pretended friend might be meditating some hostile designs. But there is, after all, no evidence of anything but distrust and fear on the part of Donnacona, and a disposition to take certain precautions with a view of guarding against any ill designs which the strangers might attempt to carry into effect before going away—precautions which, as the event proved, the occasion urgently required.

It seems that Cartier had long been intending to take with him, on his return to France, some native prince or chieftain, in order that he might exhibit him at court, and through the country in Spain, by way of visible token and proof of the

reality of his discoveries; and he had fixed his mind upon Donnacona as the most suitable person to select for this purpose. Accordingly, when the time drew near for the ships to sail, various messages were sent back and forth between the fort and Donnacona's town, and many artful plans contrived, to bring the chief on board the ships—arrangements having been made there to detain him if he should come. But Donnacona was suspicious that some wrong was intended, and he would not venture on board.

DONNACONA'S CUNNING.

At one time when certain messengers whom Cartier had sent to Donnacona's town returned, they brought a proposal from Donnacona which denoted an act of cunning and treachery on his part. It seems there was a certain person in his country named Agonna, who was in some sense his rival and enemy, so that he wished him removed out of the way; and yet the power and influence of Agonna in the tribe was such that he dared not kill him. He accordingly conceived the plan of inducing Cartier to take him on board his ship and carry him to France, and this was the proposal which the messengers of Donnacona

brought back to the fort after their visit to the village.

Cartier sent word in reply that he should have been very happy to have obliged Donnacona by taking the man away, but that it was entirely out of his power to do so, for the king of France, his master, had strictly forbidden him to bring home with him any natives of the country, except two or three boys to learn the language.

This was, of course, false. It was said only for effect, being intended to dispel from Donnacona's mind any suspicions which he might entertain of being kidnapped himself.

The intended effect was produced. Donnacona, although he was still too wary to trust himself on board the ships, was so far thrown off his guard that he was willing to come sometimes, in company with many of his people, across the river to the neighborhood of the fort, and when this point was gained Cartier laid a plan for entrapping him.

THE SEIZURE EFFECTED.

He made preparations for a grand religious celebration, to be performed on the shore in the vicinity of the fort. He set up a large cross, with the arms of the king of France suspended from it, and made arrangements for a solemn procession and

other imposing ceremonies, which he invited all the Indians to attend. They came in great numbers, men, women and children, across the river, some by canoes and some by swimming. In due time Donnacona himself arrived, attended by the two interpreters, Taignoagny and Domagaia, who had also been suspicious of a design on the part of Cartier to take them to Europe again, and were very unwilling to go. Cartier's statement that he had received express orders from the king of France not to bring any more natives to Europe had, however, put them, too, off their guard, and all three came to the celebration without any fear.

In the midst of the ceremonies, and while everybody was intent on observing them, or otherwise occupied with the various excitements of such an occasion, Cartier gave a preconcerted signal, and a company of men, who were all ready beforehand, marched out suddenly from the fort, while at the same moment all those who were standing about the grounds without rushed forward to aid them, and Donnacona, the two interpreters, and two other chieftains that Cartier had pointed out, were seized and hurried within the inclosure.

The other Indians were struck with consternation at this unexpected onset. They fled precipitately in all directions. Some ran into the woods,

others rushed to the boats, while great numbers plunged into the river and swam to the other side. Donnacona and the others who had been taken with him were placed on board the ships and shut up there securely.

DISTRESS OF THE PEOPLE.

The people were thrown into a condition of the deepest distress by the captivity of their prince. They came down that night in great numbers to the river's brink, on the further side, and there called out for a long time in piteous tones to Donnacona, beating their breasts and tearing their hair all the while, and making other barbarous demonstrations of suffering. This continued until the next day at noon, during all which time Cartier would not allow Donnacona to be brought up to speak to them. The people thought that the prisoner had been put to death, and they continually made signs to inquire whether it was so.

At last Cartier concluded to allow Donnacona to appear and speak to his subjects, in hopes that he might pacify them. He first, however, gave him special instructions to "be merrie," and to put a good face upon the matter in representing the case to the people. He charged him, moreover, to tell them that he was only going to make a visit to the

king of France, and that he should be gone only for a short time; that in a year or thereabouts he was sure to return, and that he should bring home with him, for himself and for his people, a great abundance of the richest presents, which the king of France would give him.

Donnacona did as he was bid. It was indeed greatly for his interest now to endeavor in every way to please his captors, as all his hopes, not only of being kindly treated while he was in their power, but of ever being released, depended upon their good will.

Donnacona held much other conversation with the men, but what he said to them was not interpreted, and Cartier did not understand it.

PROVISIONS FOR DONNACONA'S VOYAGE.

A few days after this a boat load of provisions, for Donnacona's use during the voyage, was brought to the ships. This boat was navigated by four women. It was not considered safe for men to come, for fear of their being detained as prisoners too. The women seemed greatly troubled at the captivity of their chief, and Donnacona begged Cartier to say to them himself that he would positively bring him back the next year. This assurance seemed to comfort them somewhat,

and they took from their persons their most valuable ornaments and presented them to Cartier as inducements to lead him to keep his promise. They told him, moreover, that in case he did truly bring Donnacona back, their people would give him far more valuable presents than those.

When the time for the sailing of the ship arrived, the people of the tribe assembled in great numbers on the bank of the river to witness the departure, and to bid their prince farewell. They made Cartier renew again and again his promise to bring him back to them the following year.

Unhappily this promise could not be fulfilled. Donnacona died in France, and although Cartier himself came back the following year, he could only bring to the poor Indians the tidings that their chief was no more.

RESULTS OF CARTIER'S DISCOVERIES.

It was indirectly in consequence of the discoveries and explorations which Cartier made in these expeditions, and of his taking possession of the territories which he visited in the name of the king of France, that the whole country bordering on the St. Lawrence was settled afterward by French colonies, and is inhabited by a French population to the present day.

CHAPTER X.

THE HUDSON RIVER.

HENRY HUDSON.

THE Hudson River—the second, perhaps, of American rivers in respect to political and commercial importance—was discovered, or at least was first entered and explored, by Henry Hudson, one of the most celebrated of the many navigators who in early times made voyages to America, in hopes of finding a way in that direction to India. It was from him, as is well known, that the river received its name.

He was not looking for a river when he entered this stream, but for an open passage leading to the South Seas. When he found, in passing into the channel which opened before him to the northward from the bay, that it was only the mouth of a river that he had discovered, he was disappointed and chagrined. He regarded his coming into it as rather a misfortune and a mistake. After exploring it for a certain distance from its mouth, he returned to what he considered the great and real

purpose of his expedition, namely, the discovery of some open passage into the South Seas. It is curious that posterity has exactly reversed the view which he took of these two elements of his work. His ideas and his efforts in respect to discovering a passage through the land to India are what are now looked upon as the illusions and mistakes of his career, while that which he considered at the time as in some sense an almost useless diversion from his real work, has been the means of gaining for him a very high and enduring fame.

FIRST AND SECOND VOYAGES OF HUDSON.

Hudson made four voyages to the American shores, the two first of which were accomplished in the years 1607 and 1608, and were directed far to the northward. He kept a minute journal of these two voyages, recording carefully in it all that happened each day. The details of his narrative consist chiefly of accounts of fields and mountains of ice seen upon the sea, of the dangers which the ships incurred in sailing among them, of the sterile and iron-bound character of the shore whenever land was in view, of the immense numbers of seals and other such animals that were seen upon the floes, of whales and porpoises in the water, migrat-

ing birds in the air, of fogs, of bitter winds, and rains so cold as almost to disable the ships, by loading the sails and rigging with ice. In a word, he met with and described in full nearly all the peculiar Arctic experiences with which the polar navigators of the last ten years have made the reading world abundantly familiar.

In some cases during these voyages Hudson sent parties of men on shore to examine the country, and to see if they could find anything of value in it. The messengers, however, usually returned, bringing with them only such things as the horns and teeth of animals, tufts of moss, some small specimens of green herbage, and now and then a stone, of some odd or peculiar appearance, which they brought on board under the idea of its possibly containing gold.

They sometimes succeeded in killing a number of birds, and also in taking eggs in considerable quantities from the nests which they found in certain localities. Some of these eggs were eatable and some were not. On one occasion, too, the sailors killed a walrus. There was a small rocky island which a company of these animals had taken possession of, having climbed up upon it in such numbers that the rock was almost completely covered with them. They, however, began to

paddle off into the water the moment that they saw the sailors coming, and they all succeeded in making their escape except one. This one the sailors had the good fortune to kill, and though they left the body where it lay, they cut off the head and carried it on board the ship as a curiosity.

THE THIRD VOYAGE.

The name of the vessel in which Hudson made his third voyage was the Half Moon. It was quite a small vessel, and it was manned by a crew of about twenty men. After meeting with various adventures, which it is not important to narrate, the expedition began to draw near to the American shores in the vicinity of Newfoundland. The cod-fishery on the banks of Newfoundland was in full operation long before this time, and in crossing the banks they passed a great number of French fishing vessels, all busily engaged in fishing. In fact, one day it fell calm, and the crew of the Half Moon let down their lines to try their own luck for fish, and from eight o'clock to one they caught "one hundred and eighteene great coddes."

LANDING IN PENOBSCOT BAY

The ship lost a foremast in a gale of wind about this time, and Captain Hudson determined to go

to the land and procure another. So he went on in the direction of the shore, sounding carefully as he advanced; and finding one night, as the darkness came on, that the water was shoaling rapidly, he came to anchor, in order to wait for day. The light of the next morning brought several fine islands in sight. These islands were in Penobscot bay. But before the crew could make sail to proceed toward the shore a fog came up, and the ship was forced to remain where she was. Two boatloads of savages, however, came off from the shore, apparently much pleased to see the strangers. Captain Hudson received the visitors kindly, and gave them something to eat and drink. He also gave them some baubles as presents. He questioned them about the country, and they told him fine stories of gold, silver and copper mines near by. They said that the French fishermen often landed there. It is probable that it was from them that the natives learned what sort of stories the Europeans liked to hear about the country, and that this was the explanation of the stories they told about the mines.

When the fog cleared up the vessel sailed in toward the land, and presently found a harbor. After placing the ship in a secure position, Captain Hudson sent a portion of the crew on shore to pro-

cure a foremast from the forest. The men cut the tree, fashioned the stem of it into a foremast, and fitted it into its place. Hudson then set sail again and went on, following the coast toward the southward. After proceeding as far in that direction as Chesapeake bay he returned, and at length, in the early part of September, he entered what is now New York bay.

THE SHIP BLOWN ASHORE.

The smallness of the size of the vessels in which these early voyages were made is illustrated very strikingly by the fact that while the Half Moon was lying at anchor in the bay a strong wind came up in the night, which caused the ship to drag her anchor and drift on shore. This did no harm, however, for the vessel took the ground at a place where the bottom was of soft mud. So the seamen remained quietly where they were until the morning. Then, after sending out an anchor in a boat, they manned the capstan, and by the help of the rising tide the crew hauled the ship off into deep water again without any difficulty.

THE INDIANS.

Several canoes came off from the shore to visit the ship, bringing with them green leaves of to-

bacco and other productions of the country. They were clothed generally in deer-skins, and some of them wore mantles very curiously made of feathers. The men had copper tobacco-pipes, and the women various ornaments made of copper.

Captain Hudson afterward sent one or two parties of men on shore, and they returned with very favorable accounts of the beauty of the country. "The lands," they said, "were as pleasant with grasse and flowers and goodly trees as ever they had seene, and very sweet smells came from them."

JOHN COLEMAN.

One of these boat expeditions sent off from the ship to reconnoitre terminated very disastrously. The party set off early in the morning with instructions to examine the channels of water in a certain direction, and take soundings. After proceeding ten or twelve miles up either the North or the East river, and accomplishing the objects for which they had been sent, they were returning at night, thinking of no danger, when they were suddenly set upon by two canoes filled with hostile Indians. It was dark, and it had begun to rain, and their match had been put out, which disabled them from firing. They, however, fought off the

Indians as well as they could, though they had one man killed in the conflict. The name of this man was John Coleman. He was killed by an arrow, which entered his throat.

There were only five men in the boat, including Coleman. The number of Indians in the canoes was nearly thirty. The white men, however, succeeded in driving the Indians away, notwithstanding the disparity of numbers. It was now, however, so dark and rainy that nothing could be seen, and the boatmen had no means of knowing which way to go to find the ship. They accordingly spent the night in beating about the bay, keeping the dead body of their comrade in the boat. The morning brought the ship into view, and they soon reached her and were received again on board. The body of Coleman was buried afterward at a point of land on Sandy Hook, which consequently received the name of Coleman's point.

Captain Hudson immediately after this brought up the boat which was used on these excursions, and hoisted it on board the ship, and then set the carpenters at work to build up the sides of it higher, so that they might on future occasions afford some shelter to the men. While this work was going on quite a large company of Indians came on board, and Captain Hudson watched them

to see if they showed any signs, while looking at the alterations which the carpenters were making in the boat, of being aware of the attack which had been made upon it, and of the death of Coleman. But they appeared so innocent and unconcerned that he concluded that they did not know anything about the affair.

He accordingly did not molest them, but after trading with them as usual he allowed them to go away in peace. He, however, soon afterward detained two of the natives who came on board, and while they remained prisoners he dressed them in red coats, like the English soldiers. These prisoners continued on board the ship a few days, but then, watching their opportunity, they leaped overboard and swam ashore.

ASCENT OF THE RIVER.

On the 12th of September Captain Hudson commenced his ascent of the river, and he went on until the 22d, advancing a few miles each day and making careful observations as he proceeded. It was necessary, of course, to move very cautiously, the channel being entirely unknown. His method was to send a boat forward eight or ten miles at a time to take soundings, and by this means to find the course of the channel. On the return of the

boat, if the report was favorable and the wind was fair, the vessel advanced, following the track thus marked out. In this manner the ship went gradually on till it passed Tappaan Bay and the Highlands, and had ascended to some considerable distance beyond. At length Captain Hudson arrived at a point of the river so high that the boat, in returning from its reconnoisance, reported that it was not safe to proceed any further. Captain Hudson then turned his course again down the stream. The boat went up twenty or thirty miles above the highest point reached by the ship.

INTERCOURSE WITH THE INDIANS.

Captain Hudson found the banks of the river occupied by Indian settlements all the way, and he had a great deal of intercourse with the natives both in going and returning. They came out to visit the ship very often in their canoes, and sometimes the numbers that came was so great that it was thought not prudent to admit them on board. In fact, Captain Hudson deemed it necessary to be continually on his guard against any act of treachery or surprise, or other hostile movements which they might attempt; for, although they professed great friendship, and brought many articles to the ship to exchange for what the white men could

give them, it was perfectly well understood that their friendship could not be relied upon for a moment if they should once find that the intruders, as they must, of course, have considered them, were in their power.

AN INDIAN PUT TO THE TEST.

On one occasion the company on board the ship resorted to an artifice that is often employed in highly civilized life for the purpose of discovering secrets, with a view to ascertain whether a certain party of Indians were covertly entertaining any hostile intentions against them, and that was by making one of the principal chiefs tipsy. They selected one who, from his appearance, they judged would probably be communicative when under the excitement of intoxicating drink, and they plied him and his companions so freely with wine and brandy—paying special attention to him in their offerings—that in the end he himself, and also some of the rest, became completely intoxicated. The company endeavored, by every means in their power, to draw from the tipsy man some revelation of the designs of his party, and continued their efforts, though without any result, as long as any intelligence remained in him. At length their poor victim sank into a state of complete insen-

sibility, and remained in that condition many hours, greatly to the amazement and concern of his friends.

MODESTY OF THE WOMEN.

In several instances during this voyage the chiefs brought their wives with them to see the ships. Captain Hudson and his men were much struck with the modesty and propriety of demeanor which these female visitors observed while in the presence of the strangers. They sat quietly and decently, he said, and were in all respects as modest and gentle in their manners as any of the most high-bred ladies in England would have been in paying a visit to a foreign vessel in an English harbor.

APPROACH TO THE HIGHLANDS IN DESCENDING THE RIVER.

The attention of Captain Hudson was strongly attracted to the appearance of the Highlands as he approached them in coming down the river. He notes the smooth and beautiful appearance of the country above the line where the mountains commence, and the suddeness of the change which here takes place in the whole character of the scenery, the narrow, tortuous and dangerous channel, bordered by lofty mountains rising from the very

brink of the water, the angular turns which the river makes, and the sharp rocks and bold promontories which here and there project into the stream.

The vessel arrived at the borders of the Highlands about three o'clock in the afternoon, but as the tide was at the ebb at that time, and the day was somewhat spent, Captain Hudson did not think it safe to proceed that night, but came to anchor, in order to wait until the next morning before going on, "for the reason," as he said, "that the land hath many high points and narrow channells, which occasion many eddie winds. So we rode quietly all night in seven fathoms water."

The next morning the wind blew up the river very fresh, and Captain Hudson deemed it unsafe to attempt to pass through the mountains. So he remained at his anchorage all that day, looking at the towering summits before him, and receiving from time to time different parties of Indians from the neighborhood, who came in their canoes to visit the ship.

As for "the mountaynes," they looked, as he thought, "as if some metall or minerall were in them. For the trees that grow on them were all blasted, and some of the mountaynes were barren, with few or no trees on them."

AN INDIAN CHIEF.

After remaining a day and two nights weather-bound at the entrance to the Highlands, Captain Hudson found the wind fair on the morning of the third day, and he accordingly then made sail and continued his voyage down. The distance, as he calculated it, was about twenty miles. When the Highland region had been safely passed, Captain Hudson came to anchor again, and many Indians from the mountain region came on board the vessel, wondering at the magnitude of the ship, and at the weapons possessed by the white men.

When the ship set sail again, to continue her voyage down the river, the pilot observed that among other canoes hovering near there was one with a single man in it, which followed close behind, keeping all the time under the stern. The men on board made signs to this man again and again, ordering him to go away, but he did not heed them, and finally, watching an opportunity when he was not observed, he climbed up by the rudder into the cabin windows and stole the pillows from the Captain's berth, and several articles of clothing. He succeeded in getting off with these things unobserved, and in taking them down on board his canoe by the same way that he had

come up. The mate of the vessel saw him, however, as he was paddling away with his booty, and seizing a gun, fired at him. The ball struck him in the breast and killed him on the spot.

There were at the same time a number of Indians on board the ship, or in canoes alongside, and when they saw their countryman killed, they immediately fled. Those that were in the vessel leaped overboard and escaped by swimming, while those that were in the canoes began at once to paddle away in all directions.

At the same time the ship's boat was manned, and a party was sent off to the canoe in which the dead body of the thief was lying, in order to recover the stolen goods. While they were going toward the canoe, one of the Indians that was swimming in the water came up and seized the boat by the gunwale, and commenced rocking it to and fro, in order to upset it. Seeing this, a boatman seized a sword and cut off one of the man's hands at a blow. The poor savage fell back from the boat, disabled as he was by the wound, and overcome with agony and terror, he sank into the water and rose no more.

END OF THE VOYAGE IN THE RIVER.

At length, after the lapse of about five weeks

from the time of entering the river, Captain Hudson reached the mouth of it again on his return. He experienced some difficulty in getting safely out to sea, having, of course, no chart, and no proper means, except by sending a boat out beforehand to take soundings, for finding the channels. He consequently lost his way in some degree among the shoals and sand-bars, and finally found himself in considerable danger of running aground. He, however, went cautiously on, and at length succeeded in getting into deep water.

"By twelve of the clocke," says the original narrator of this story, "we were cleere of the inlet. Then we tooke in our boat and set our mayne-sayle and sprit-sayle and our top-sayles, and steered away east south-east and south-east by east, off into the mayne sea."

SUBSEQUENT HISTORY OF HUDSON.

In the year 1610, Hudson made another voyage to the American shores—a voyage that terminated in the most disastrous manner. A very full and graphic account of all that happened was written by one of the ship's company, and a more piteous tale of distress and suffering than this narrative presents it would be impossible for any imagination to conceive.

The vessel, after encountering the usual dangers and vicissitudes of such a voyage, at length became beset in the ice, and was borne away so far by the drift of the floes, and detained so long by this imprisonment, and by contrary winds, that the provisions fell short, and the scarcity increased to such a degree that at length it was evident that there was not food enough remaining to maintain the men, even on the most stinted allowance, during the time necessary for returning to England. This state of things plunged the whole company into the greatest despondency.

HENRY GREENE.

Besides the suffering and danger resulting from this scarcity of provisions, insubordination and discord reigned supreme on board the ship. Captain Hudson seemed to have his men very little under his command. He had a young man on board named Henry Greene, who acted as his secretary, and was in some sense his favorite. Greene was an unprincipled and desperate man, dissipated and vicious. He was not regularly one of the ship's company—his name not being on the books. He was taken on board on the private responsibility of Captain Hudson, who, for some reason or other, had taken a fancy to him. The rest of the com-

pany were jealous of Greene, and of the favoritism with which the captain treated him. Some of their complaints were based on grounds which would seem to be of an extremely frivolous character, but the animosity and hatred which they engendered were none the less decided on that account. One of the most violent of the disputes and altercations which occurred commenced in a difficulty that arose out of the disposition made of the clothes of a sailor who had died, particularly of a certain gray cloth gown.

THE GUNNER'S GRAY CLOTH GOWN.

The gunner died, and among the effects that he left was a gray gown or jacket. It was the custom to sell the clothes and other property of the sailors dying at sea in those days, at the foot of the mainmast, to the highest bidder, and many of the crew were desirous of purchasing the gown. But the captain, in the exercise of his favoritism, forestalled them by making a bargain with Greene for it, at private sale. This, of course, greatly incensed all the rest of the company. They loudly complained of the injustice of the proceeding, and the whole ship was full of the criminations and recriminations of the different parties to the quarrel. It was amazing that such a quarrel could arise

from an occurrence like this in a ship's company already in a condition of the deepest distress, and with the horrors of actual starvation closely impending over them.

THE CAPTAIN QUARRELS WITH GREENE.

After exciting the enmity of all the rest under his command by his undue partiality for Greene, the captain ended by quarreling with Greene himself, so as in effect to cut himself off almost entirely from the friendly feeling and sympathy of his men. He had a difficulty with the carpenter about building a hut on shore. After hesitating and delaying a long time, he had finally concluded, when all hope of returning to England for the season was gone, to undertake this work, and he gave orders to the carpenter accordingly. The carpenter said it was now too late. The weather was so cold and stormy that it would be impossible to manage such work. He could not and he *would* not undertake building in the midst of so much frost and snow. When Captain Hudson heard this reply he abused the carpenter in the most violent manner. He pulled him out of his cabin to beat him, and threatened to hang him. The carpenter answered that he knew his own business, and that

Hudson was the captain of the ship, not the carpenter. The captain went away in a rage.

The next day the carpenter was going on shore, and as the rule was that no one should go on shore alone, Henry Greene went with him as his comrade and friend. This the captain considered as a token and sign that Greene was disposed to take sides with the carpenter against him, and this caused him to turn the current of his anger from the carpenter to Greene. He declared that, after all, Greene should not have the gray jacket. Greene urged the captain's promise. The captain replied with bitter vituperation. He told Greene that he was a worthless fellow, and that the best friends he had in the world would not trust him for twenty shillings, and he did not see why *he* should be expected to give him credit any more than they.

THE MUTINY.

It would make a very long story to relate in full the gradual progress of insubordination and contention which ensued, and to describe the successive steps by which this wretched crew sank into those fearful depths of distress and misery which the continual increase of cold and hunger and their own terrible quarrels brought upon them.

The end was, that after passing through scenes of violence and suffering too dreadful to be described, a portion of the crew, headed by Greene, formed a conspiracy to put the captain, and with him all the sick and dying men on board the ship, eight in number, into a boat and leave them in the open sea, while they themselves attempted to make their way to England.

The scene presented on board the vessel when the mutineers rose to carry this scheme into effect, and were engaged in putting the men on board the boat, was horrible in the extreme. Some of their victims submitted quietly in silent despair. Others resisted with all the strength that remained to them, making frantic efforts and uttering piercing cries. Two of the wretched men had friends among the crew, who endeavored to make their cases exceptions, and this led to violent disputes among the mutineers themselves, some declaring that these men should not go, others swearing with horrid imprecations that they should go, and offering to fight, if necessary, in order to carry their determination into effect.

Captain Hudson, who had been seized and secured at the outset, had his hands tied behind him, and was compelled to submit helplessly to whatever his reckless enemies chose to do.

THE LAST THAT WAS EVER KNOWN OF CAPTAIN HUDSON.

When all the men were put on board the boat, the boat itself was dropped astern, and there taken in tow by the ship and conveyed, with its dreadful burden of suffering and despair, out of the bay or harbor where these events had taken place. Then she was cut loose, and the ship sailed on, leaving her to her fate.

The mutineers did not abandon the party in the boat in this manner with the bare and naked intention of murdering them. They considered that they were giving them at least a chance for their lives. They furnished them with some small supply of provisions, and the boat was fitted with a sail. They might possibly find a refuge among the natives somewhere upon the coast for a time, and finally be saved by some other European vessel visiting those shores. Or, even if they followed the ship to sea, they might there meet with some other vessel by which they might be rescued.

One of the men who was to go in the boat, in fact, just before he was put into it, begged one of those on board the ship to say to the natives at a certain place on the coast, where the ship was to stop in hopes of obtaining provisions, before finally

putting to sea, that the boat was coming on, and to ask them to save something for them too. This the person who was entrusted with the message promised that he would do.

On the next day after the boat had been left, while the ship was loitering near the shore, making some preliminary arrangements before putting to sea, there was a cry on board that the boat was coming in sight. They immediately spread all their sails and hastened on, as if flying from an enemy.

The ship, after cruising about those shores for some time, seeking for provisions, sailed for England, and the crew, after encountering hardships and sufferings which it would seem impossible for human beings to survive, at length reached a port in Ireland, and a remnant of them were saved, though they were soon afterward seized and committed to prison, to answer for their crime.

The boat in which Captain Hudson had been left was never heard of more.

CONCLUSION.

We have thus narrated some of the principal voyages of discovery made in early times to the American shores. It was the work of about a hundred years to trace in this manner the great

leading outlines of the continent, and to make them known to the European world, so as to prepare the way for the successful colonization of the country. These hundred years are comprised substantially in the sixteenth century. The succeeding century, the seventeenth, was devoted mainly to the work of planting the country thus explored, with the germs of a new and superior population.

Thus, the sixteenth century was the century of discovery; the seventeenth that of settlement; and the eighteenth that of the union of the various political communities that had been formed, and the establishment, through this union, of a grand, independent, and consolidated empire. The successive steps of the progress by which this vast movement advanced to its final consummation will be developed in the succeeding volumes of this series.

THE END.

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